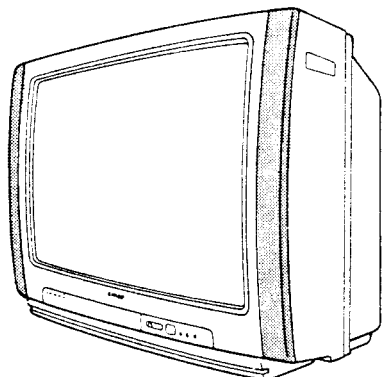


**SHARP****SERVICE MANUAL**

S43W525AN1B//



**28 SYSTEM  
COLOUR TELEVISION**  
**Chassis No. C-200**

**MODEL 25AN1(B)**

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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**WARNING**

The chassis in this receiver is partially hot. Use an isolation transformer between the line cord plug and power receptacle, when servicing this chassis.

To prevent electric shock, do not remove cover. No user — serviceable parts inside. Refer servicing to qualified service personnel.

**SHARP CORPORATION**

# ELECTRICAL SPECIFICATIONS

Power Input .....	200 V~240 V AC, 50/60 Hz
Power Consumption .....	155 W
Convergence .....	Self Converging System
Focus .....	Bi-Potential, Uni-Potential Electrostatic
Sweep Deflection .....	Magnetic
Intermediate Frequencies	
Picture IF Carrier .....	38.9 MHz
Sound IF Carrier	
6.5MHz .....	32.4 MHz
6.0MHz .....	32.9 MHz
5.5MHz .....	33.4 MHz
4.5MHz .....	34.4 MHz
Colour Sub-Carrier	
PAL/NTSC .....	34.47 MHz
SECAM .....	34.494/34.65 MHz
NTSC .....	35.32 MHz
Audio Power Output Rating .....	7.5W x 2 (Max.)
Speaker	
Size .....	12cm x 6cm Oval x 2 pcs
Voice Coil Impedance .....	8 $\Omega$ at 400 Hz
Aerial Input Impedance .....	75 $\Omega$ Unbalanced
Receiving Channels	
● PAL-B/G, SECAM-B/G	
VHF .....	E2 thru E12
UHF .....	21 thru 69
CATV .....	S1 thru S3, M1 thru M10 U1 thru U10
● PAL-D/K, SECAM-D/K	
VHF .....	R1 thru R12
UHF .....	21 thru 69, China 57
● PAL-I	
VHF .....	(IRELAND): B thru J
UHF .....	(U.K., H.K.): 21 thru 69
● NTSC-M	
VHF .....	(US): 2 thru 13
	(JAPAN): 1 thru 12
UHF .....	(US): 14 thru 79
	(JAPAN): 13 thru 62
CATV .....	A-6 thru A-1, A thru W, AA
Receiving Frequency	
VHF .....	48.25 MHz thru 295.25 MHz
UHF .....	471.25 MHz thru 863.25 MHz

*Specifications are subject to change without prior notice.*

## IMPORTANT SERVICE NOTES

Maintenance and repair of this receiver should be done by qualified service personnel only.

### SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove static charge from it by connecting a 10k ohm Resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage completely.

### X-RAY

This receiver is designed so that any X-Ray radiation is kept to an absolute minimum. Since certain malfunctions or servicing may produce potentially hazardous radiation with prolonged exposure at close range, the following precautions should be observed:

1. When repairing the circuit, be sure not to increase the high voltage to more than 32.0 kV, (at beam 0  $\mu$ A) for the set.
2. To keep the set in a normal operation, be sure to make it function on 28.7 kV  $\pm$  1.5 kV (at beam 1.4 mA) in the case of the set. The set has been factory — Adjusted to the above-mentioned high voltage.
  - ∴ If there is a possibility that the high voltage fluctuates as a result of the repairs, never forget to check for such high voltage after the work.
3. Do not substitute a picture tube with unauthorized types and/or brands which may cause excess X-ray radiation.

### BEFORE RETURNING THE RECEIVER

Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating fishpapers, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators etc.

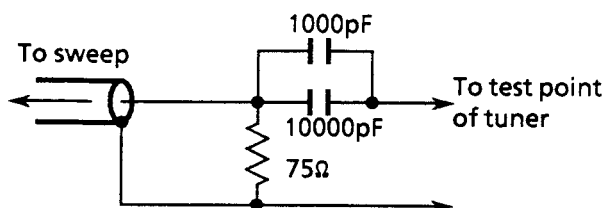
# SERVICE ADJUSTMENT

## PIF/AFT/AGC ADJUSTMENT

### TUNER IFT COIL

The tuner has been factory preset (no adjustment is needed).

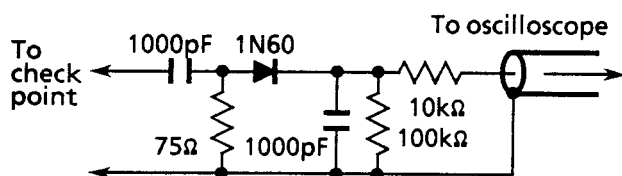
1. Keep the set without any signal input. Set  $V_T$  voltage at 11V in  $V_H$  band.
2. Connect sweep generator's output to the test point of tuner, by using a 75 $\Omega$  DC cut probe.



Connection Diagram of 75 $\Omega$  DC Cut Probe.

Note: The earth point of sweep generator's probe should be grounded closely to the tuner test point.

3. Output level of sweep generator: 80 dB
4. Connect response lead (low impedance probe with detector) to the IF output terminal of the tuner.

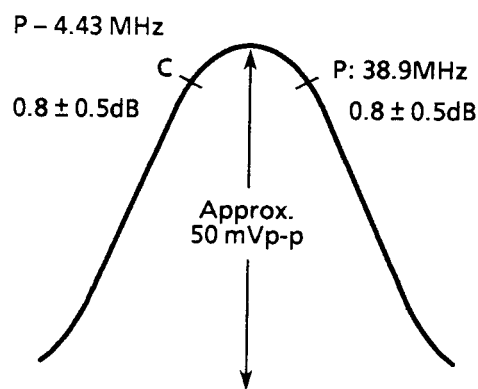


Connection Diagram of Low Impedance Probe (with Detector).

5. RF AGC: 0V.

6. Adjust the tuner IF coils to obtain the waveform as shown figure below.

Note: For the adjustment, keep the tuner covered with its lid.



Adjust so that "P" and "C" are at the same level.

### VCO FREE-RUN FREQUENCY ADJUSTMENT: T2003

1. Keep the set without any signal input.
2. Make a short-circuit between TP2002 and ground.

Measure the voltage at TP2001 with a multimeter and record the reading.

Note: Use a multimeter that has a scale in mV.

3. Connect the sweep generator's output to the IF output terminal of the tuner.

• Frequency: 38.9MHz (CW)  $\pm$  5kHz.

• Sweep output level: 80 to 90dB $\mu$ V.

Note: Before starting this adjustment, keep IC2001 energized for more than 2 minutes.

4. Break the short-circuit between TP2002 and ground. Adjust T2003 so that the multimeter should read the same voltage as that in the above step 2.

• Accuracy: Reading in step 2  $\pm$  10mV (3.2kHz/mV).

At this time, observe the waveform at TP201 (detection output) on the oscilloscope screen to make sure there is an output of approx. DC 3V.

• Range: DC 1V/div.

Note: Check the waveform on the oscilloscope screen for noises or beating. Any noise or beating means maladjustment.

## PIF/AFT/AGC ADJUSTMENT (Continued)

## RF-AGC CUT-IN CONTROL: R219

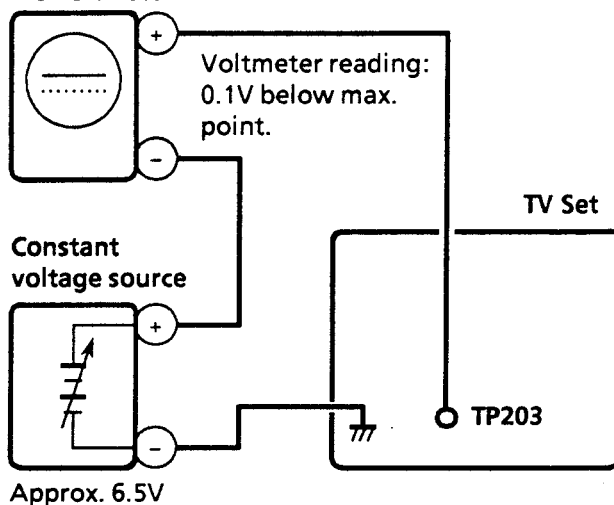
1. Tune the TV set in to the VHF high band (over channel E10) and receive "PAL COLOUR BAR" signal.

- Field intensity:  $57\text{dB} \pm 1\text{dB}\mu\text{V}$   
(with  $75\Omega$  terminated)

Note: Adjust a 50-ohm field intensity meter to 55 to 56dB level if no 50/75 impedance transducer is used. Pay attention to a loss if using an impedance transducer.

2. Connect the oscilloscope or DC voltmeter to TP203.
3. Turn R219 to make the voltage highest.
4. Slowly turn R219 in the opposite direction until the voltage goes down 0.1V from the highest level.
5. Adjust the signal level to 63 to 67dB $\mu\text{V}$  and make sure there is no noise.
6. Now adjust the signal level to 90 to 95dB $\mu\text{V}$  and be sure that there is no cross modulation beat.

Oscilloscope or  
DC Voltmeter



## AFT COIL: T2002

1. Tune the TV set in to the VHF high band (over channel E10) and receive "PAL COLOUR BAR" signal.

- Signal strength: Over 55dB, Below 80dB.

2. Connect oscilloscope to TP201.

- Range: 0.5V/div.
- Sweep time:  $20\mu\text{sec/div.}$
- Synchronization: Horizontal sync.

3. Connect the output of SSG (Standard Signal Generator) to the tuner IF output terminal across a capacitor of 1pF.

- SSG output frequency:  
 $38.9\text{MHz (CW)}$   
 $38.9\text{MHz} \pm 5\text{kHz}$

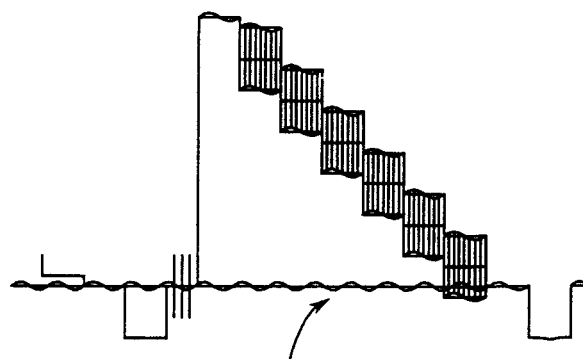
- SSG output level: approx. 50dB

4. Set the preset switch at VHF-H tuning position and adjust FINE button (Up or Down) of tuning control so that the output waveform suffers no beating.

5. Set the preset switch at NORMAL position.

6. Adjust T2002 so that no beating is caused at the output waveform.

- Adjustment error:  $38.900\text{MHz} \pm 25\text{kHz}$



Finely adjust to make zero the beating

## SOUND ADJUSTMENT

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### RF-SUB-SOUND ADJUSTMENT: R234

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1. Receive the "SECAM COLOUR BAR" signal.
  - Sound modulation: 400Hz, 60%.
2. Connect oscilloscope to TP1301.
3. Adjust R234 so that the 400Hz sine waveform is 0.6Vp-p.
  - Adjustment error:  $0.6 \pm 0.04$ Vp-p.

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### SUB-SOUND ADJUSTMENT: R333

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1. Receive the "PAL COLOUR BAR" signal.
  - Audio signal: 400Hz, 100% modulation
2. Connect the VTVM to TP301.
3. Make sure the SURROUND mode is off.
4. Turn up the sound volume to maximum.
5. Adjust R333 so that the VTVM reading at TP301 be 6.9 Vrms.

---

### NOISE MUTE CHECKING

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1. Receive the "PAL COLOUR BAR" signal.
  - If not available, receive any broadcast station.
2. Turn up the volume control all the way and make sure sound comes out of the speakers. Then shut off the signal.
3. Make sure the sound mute effect is on.

## PURITY ADJUSTMENT

**Note:** During the adjustment, keep the unit facing the east.

### PURITY ADJUSTMENT

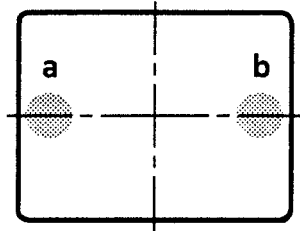


Figure A.

1. Prior to the purity adjustment, warm up the unit with beam current of 1.1mA, for more than 30 minutes.
2. Receive the green signal alone and adjust the Contrast control so that the beam current is 1.1mA.
3. Fully degauss the CRT with the degaussing coil.
  - Vertical  $B_V$ :  $+0.45 \times 10^{-4} \text{T}$  (+0.45 gauss)
  - Horizontal  $B_H$ : 0T (0 gauss)
4. Set the purity magnet at the position which gives zero (0) magnetic field.

#### Adjustment:

5. Observe the green spots ("a" and "b") with a microscope as shown *Fig. A*, and adjust the purity magnet so that they are at the specified landing position (Rank "A").
6. Set the raster rotation at "0" position (with the unit facing the east).
7. Tighten the screws of the deflection coil.  
Tightening torque:  $11 \text{ kg} \pm 2 \text{ kg}$ .
8. Look at the CRT corners. Apply the magnet sheets so that the landings should be of Rank "A".

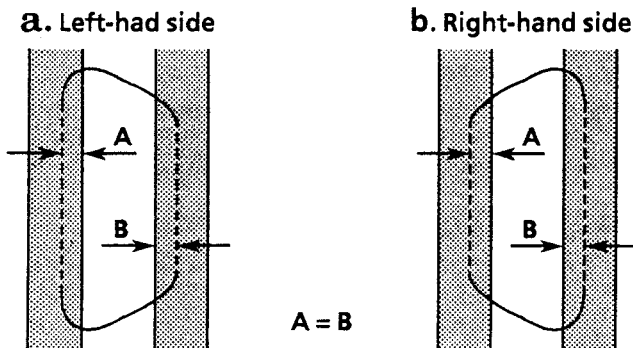
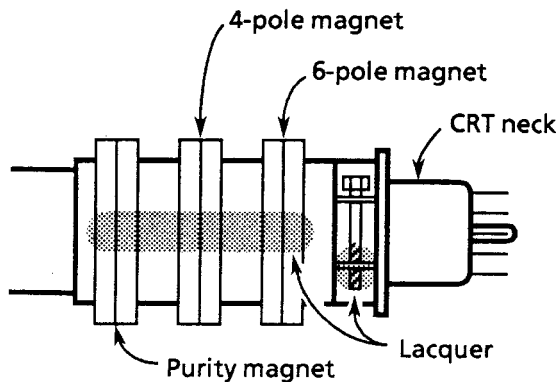
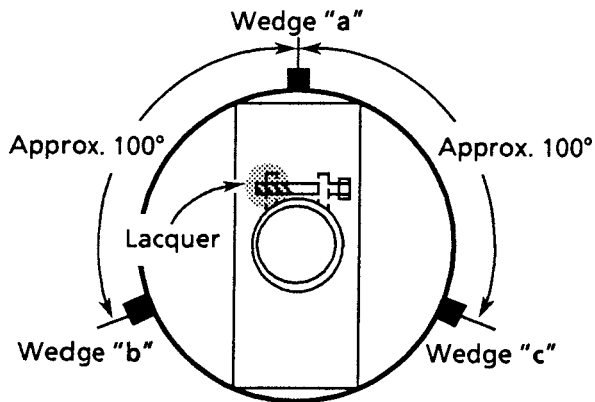


Figure B. Rank "A" landing

## CONVERGENCE ADJUSTMENT

**Note:** During the adjustment, keep the unit facing the east.

### CONVERGENCE ADJUSTMENT



This adjustment should be performed after the purity magnet adjustment.

1. Receive "CROSSHATCH PATTERN" signal.
2. Set the Brightness control and Contrast control at MAX position.

#### STATIC CONVERGENCE

3. Adjust the opening degree of the 4-pole magnet and rotate the magnet to converge red and blue lines.
4. Adjust the opening degree of the 6-pole magnet and rotate the magnet to converge red, blue and green lines.

#### DYNAMIC CONVERGENCE

5. Dynamic convergence (convergence of the three colour fields) at the edges of CRT screen is accomplished in the following manner.

##### Convergence in Fig. a:

Insert wedge "a" between the deflection yoke and CRT, and tilt the deflection yoke upward until the mis-convergence shown in Fig. a is corrected.

##### Convergence in Fig. b:

Insert wedges "b" and "c" between the deflection yoke and CRT, and tilt the deflection yoke until the mis-convergence shown in Fig. b is corrected.

##### Convergence in Fig. c:

Insert wedge "c" deeply between the deflection yoke and CRT, and tilt the deflection yoke to right until the mis-convergence shown in Fig. c is corrected.

##### Convergence in Fig. d:

Insert wedge "b" deeply between the deflection yoke and CRT, and tilt the deflection yoke to left until the mis-convergence shown in Fig. d is corrected.

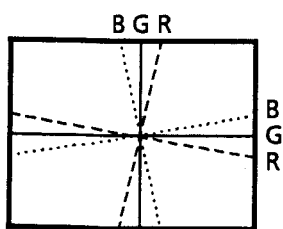


Figure a.

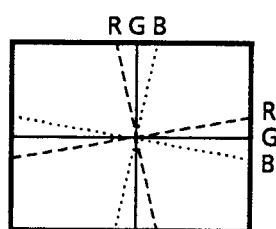


Figure b.

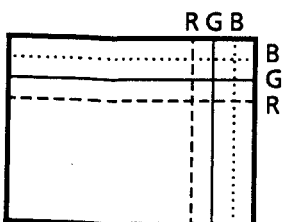


Figure c.

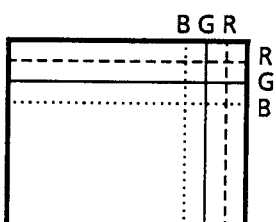


Figure d.

6. Stick the three wedges onto the CRT, and apply glass tapes thereon.
7. Apply lacquer to the deflection yoke screw, magnet unit (made of purity, 4-pole and 6-pole magnets) and magnet unit screw.

After the adjustment, receive either the Red or the Blue signal and check that there is no mixture with the other colour signal.



## HORIZONTAL AND VERTICAL CIRCUIT ADJUSTMENT

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### VERTICAL LINEARITY: R514

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- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Receive the "MONO SCOPE PATTERN" signal.</li> <li>2. Press the video "N" key of the remote controller.</li> <li>3. Roughly adjust Vertical Size control R510 to given an 8% overscan.</li> </ol> | <ol style="list-style-type: none"> <li>4. Adjust R514 for optimum vertical linearity. This is achieved by making the upper and lower halves of the circular pattern symmetric.</li> </ol> |
|--|---|

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### VERTICAL CENTER and VERTICAL SIZE

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- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• S501: Vertical Center</li> <li>• R510: Vertical Size</li> </ul> <ol style="list-style-type: none"> <li>1. Receive the "MONO SCOPE PATTERN" signal.</li> <li>2. Press the video "N" key of the remote controller.</li> </ol> | <ol style="list-style-type: none"> <li>3. Adjust Vertical Center switch S501 at the position where the pattern's vertical Center coincides with the CRT's geometrical vertical Center. S501 is a step-by-step rotary switch. Set it at the optimum position.</li> <li>4. Adjust Vertical Size control R510 to obtain an 8% overscan.</li> </ol> |
|--|---|

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### HORIZONTAL CENTER and HORIZONTAL SIZE

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- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• R602: Horizontal Center</li> <li>• L606: Horizontal Size</li> </ul> <ol style="list-style-type: none"> <li>1. Receive the "MONO SCOPE PATTERN" signal and roughly adjust Horizontal Size control L606 to give about 8% overscan.</li> <li>2. Press the "N" key of the remote controller.</li> </ol> | <ol style="list-style-type: none"> <li>3. Align the pattern's horizontal Center with the CRT's geometrical horizontal Center by adjusting Horizontal Center control R602.</li> <li>4. Adjust Horizontal Size control L606 to give and 8% overscan.</li> </ol> |
|--|---|

## VIDEO CIRCUIT ADJUSTMENT

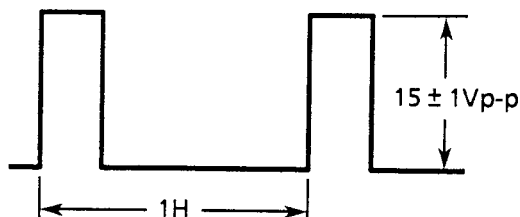
### CRT CUT-OFF and SUB-BRIGHTNESS ADJUSTMENT

- R403 : Sub Bright
- R2816: Red Bias control
- R2817: Green Bias control
- R2818: Blue Bias control
- Screen control (a part of T601)
- R2811: Green Drive control
- R2812: Blue Drive control

**Note:** Prior to this adjustment, warm up the unit with the beam current of  $1100\ \mu\text{A}$  for more than 30 minutes.

1. Receive "MONOSCOPE PATTERN" signal.
2. Set R-bias control at MIN (0/10) position.  
Set G-bias control at MIN (0/10) position.  
Set B-bias control at MIN (0/10) position.  
Set G-drive control at CENTER (5/10) position.  
Set B-drive control at CENTER (5/10) position.
3. Turn on the video "N" key on the remote controller.
4. Set the Contrast control at MIN position.
5. Set the Screen control at MIN (0/10) position.
6. Connect the oscilloscope to TP2801 (red cathode).

7. Set service switch S401 at the horizontal line position.
8. Adjust Sub-Brightness control R403 to obtain a blanking pulse level of  $15\text{V} \pm 1\text{Vp-p}$  at TP2801.



9. Disconnect the oscilloscope from TP2801.
10. Slowly turn the Screen control clockwise and stop it where the horizontal raster appears slightly, in one of the three colours.
11. Carefully adjust the Bias controls of the other two colours until the horizontal raster becomes white.
12. Turn the Screen control counterclockwise until the horizontal raster just disappears.

### WHITE BALANCE and BACK GROUND

- R2811: Green Drive control
- R2812: Blue Drive control
- R416: Sub-Contrast control

**Note:** Prior to this adjustment, warm up the unit with the beam current of  $1100\ \mu\text{A}$  for more than 30 minutes.

1. Receive "MONOSCOPE PATTERN" signal.
2. Press the video "N" key of the remote controller. Contrast will thereby become maximum and brightness medium.
3. Connect the ammeter to TP601 and TP602.  
(Full scale: 3 mA)

4. Adjust the Sub-Contrast control to obtain a beam current of approx. 1.4 mA. (rough adjustment)
5. Adjust Green Drive and Blue Drive controls to obtain a colour temperature of  $7500^\circ\text{K}$  (white).
6. Reduce the beam current to approx.  $200\ \mu\text{A}$  by adjusting the Contrast and Brightness controls, and check the background colour. If the colour temperature is not  $7500^\circ\text{K}$ , repeat the adjustment in step 5.

### SUB-CONTRAST CONTROL: R416

**Note:** Prior to this adjustment, warm up the unit with the beam current of  $1100\ \mu\text{A}$  for more than 30 minutes.

1. Receive "MONOSCOPE PATTERN" signal.
2. Press the video "N" key of the remote controller. Contrast will thereby become maximum and brightness medium.
3. Connect the ammeter between TP601 (–) and TP602 (+), and select the 3mA range.

4. Adjust Sub-Contrast control to obtain a beam current of 1.4 mA.

**Note:**

Beam current should become approx. 1.45 mA when both the Contrast and Brightness controls are set to maximum.

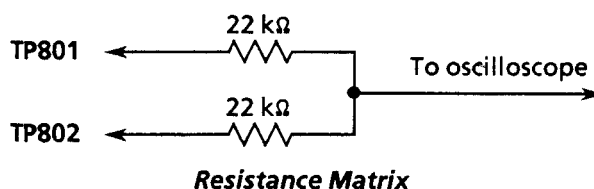
## CHROMA CIRCUIT ADJUSTMENT "PAL"

### PAL CHROMA ADJUSTMENT

- R1810: 1H-delay amp. control
- T1801: 1H-delay phase control

Note: PIF/AFT/AGC adjustments should have been completed before starting this adjustment.

1. Receive the "PAL COLOUR BAR" signal.
2. Connect the following resistance matrix to TP801 and TP802, to which an oscilloscope is connected.



3. Set service switch S401 at the Video Cut position to cut off the Y-signal.
4. Press the video "N" key of the remote controller.
5. Operating the colour control key on the remote controller, adjust the difference between the green and magenta signal levels to 1.5Vp-p as shown in Fig. A.
6. Adjust R1810 and T1801 so that the output waveform becomes as shown in Fig. B.
7. Set service switch S401 to the centre position.

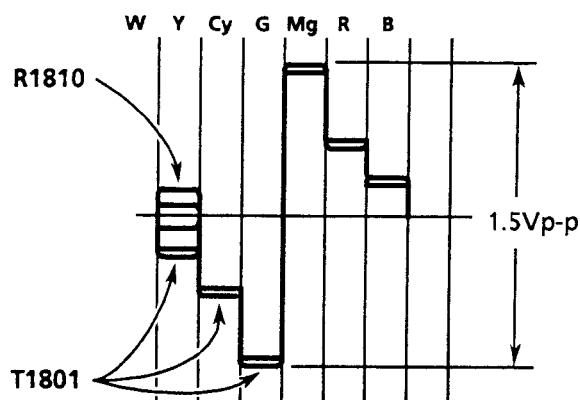


Figure a. Waveform before the adjustment

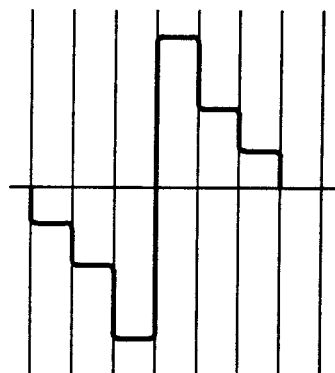
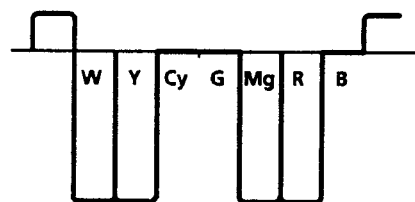


Figure b. Waveform after the adjustment

### PAL SUB-COLOUR: R1804

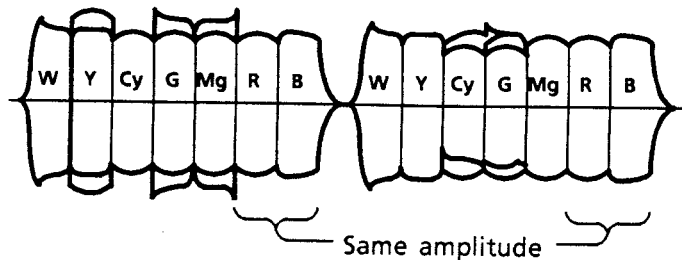
1. Receive the "PAL COLOUR BAR" signal.
2. Turn on the video "N" key of the remote controller.
3. Connect the oscilloscope to TP2801 (red cathode).
  - Range: 20V/div.
  - Sweep time: 20μsec/div.
4. Adjust R1804 so that the white signal (75%) and red signal have the same level as shown below.



## CHROMA CIRCUIT ADJUSTMENT "SECAM"

### BELL FILTER ADJUSTMENT: T1903

1. Receive "SECAM COLOUR BAR" signal.
2. Connect oscilloscope to TP901 with the following settings.
  - Range: AC 0.05 V/div.
  - Sweep Time: 20  $\mu$ sec/div.
  - Probe: 1/10 (30pF, 10M $\Omega$  or more)
3. Adjust the Bell Filter (T1903) so that the red and blue portions of the colour bar signal should have the same amplitude.



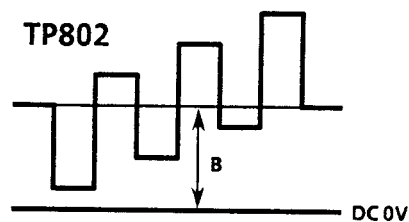
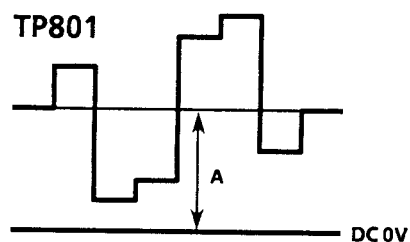
### SECAM KILLER ADJUSTMENT: T1904

1. Receive "SECAM COLOUR BAR" signal.
2. Connect oscilloscope to TP902 with the following settings.
  - Range: DC 1V/div.  
(Adjust vertical position properly.)
  - Sweep Time: 20  $\mu$ sec/div.
3. Adjust T1904 to obtain maximum DC voltage (approx. 7.5V) at TP902.

### B-Y (T1901), R-Y (T1902) DISCRIMINATOR ADJUSTMENT

**Note:** Connect a 0.001  $\mu$ F capacitor to TP801 and TP802 respectively to filter out interference noise.

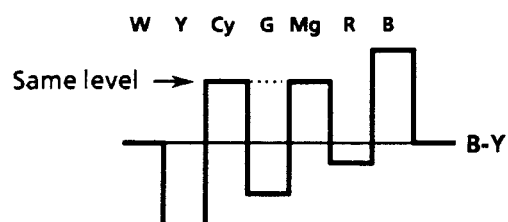
1. Receive "SECAM COLOUR BAR" signal.
2. Connect the oscilloscope (with two channels) to TP801 (R-Y) and the TP802 (B-Y), both located on the CRT Socket Unit (PWB-C) of the set.
  - Range: DC 2V/div.
  - Sweep Time: 10  $\mu$ sec/div.
3. Set service switch S401 at the Video Cut position to cut-off the Y-signal.
4. Set both the Contrast and Brightness controls to their maximum positions.
5. Adjust T1901 and T1902 so that the DC output levels obtained when the colour control is set to minimum (black and white level) and those when set to 100% colour saturation become the same.
6. Set service switch S401 to the center position.



## CHROMA CIRCUIT ADJUSTMENT "NTSC"

### SUB-HUE: R1805

1. Receive "NTSC COLOUR BAR" signal.
2. Connect oscilloscope to TP802 (B-Y).
3. Turn on the video "N" key of the remote controller.
4. Set service switch S401 to the Video Cut position to cut-off the Y-signal.
5. Operating the Colour control key on the remote controller, adjust the B-Y waveform to approx. 3Vp-p.
6. Adjust Sub-Hue control R1805 so that the waveform is obtained.
7. Set service switch S401 to the center position.



## PROTECTOR PERFORMANCE CHECK

### BEAM PROTECTOR

1. Receive "MONO SCOPE PATTERN" signal.
2. Adjust the Contrast control to maximum.
3. Adjust the Brightness control to maximum.
4. Make the collector and emitter of Q2801 short-circuited.
5. Confirm that the protector is activated and selects the stand-by mode.

### HIGH VOLTAGE PROTECTOR

1. Receive "MONO SCOPE PATTERN" signal.
2. Connect the bias box across R675.
3. Check the functioning of the H.V. protector with different voltages applied through the bias box as follows:
  - It should not operate at 20V.
  - It should operate at 24V.

## PICTURE CONTROL KEY PERFORMANCE CHECK

### CONTRAST KEY

1. Receive "MONO SCOPE PATTERN" signal.
2. Using the picture select switch, call the contrast mode.
3. Confirm that the screen contrast changes when the Up/Down key is pressed.

### SURROUND

1. Set the Surround switch in the front-door to S-WIDE.
2. Push the Surround switch of Remote Controller and make sure that the surround LED is light-up.

### COLOUR KEY

1. Receive "NTSC COLOUR BAR" signal.
2. Using the picture select switch, call the colour mode.
3. Confirm that the colour changes when the Up/Down key is pressed. (The picture should be completely discoloured when the colour level is set to minimum.)

### CHANNEL SIGN DISPLAY COLOUR

Make sure all the channel signs (Channels 1 thru 39) are displayed in green.

### BRIGHTNESS KEY

1. Receive "MONO SCOPE PATTERN" signal.
2. Using the picture select switch, call the brightness mode.
3. Use the Up/Down key to make sure the black level changes.

### BLUE BACK SWITCH

Turn on the blue back switch. With no signal input, make sure the screen background turns blue. Turn it off to see if the blue back effect is cut-off.

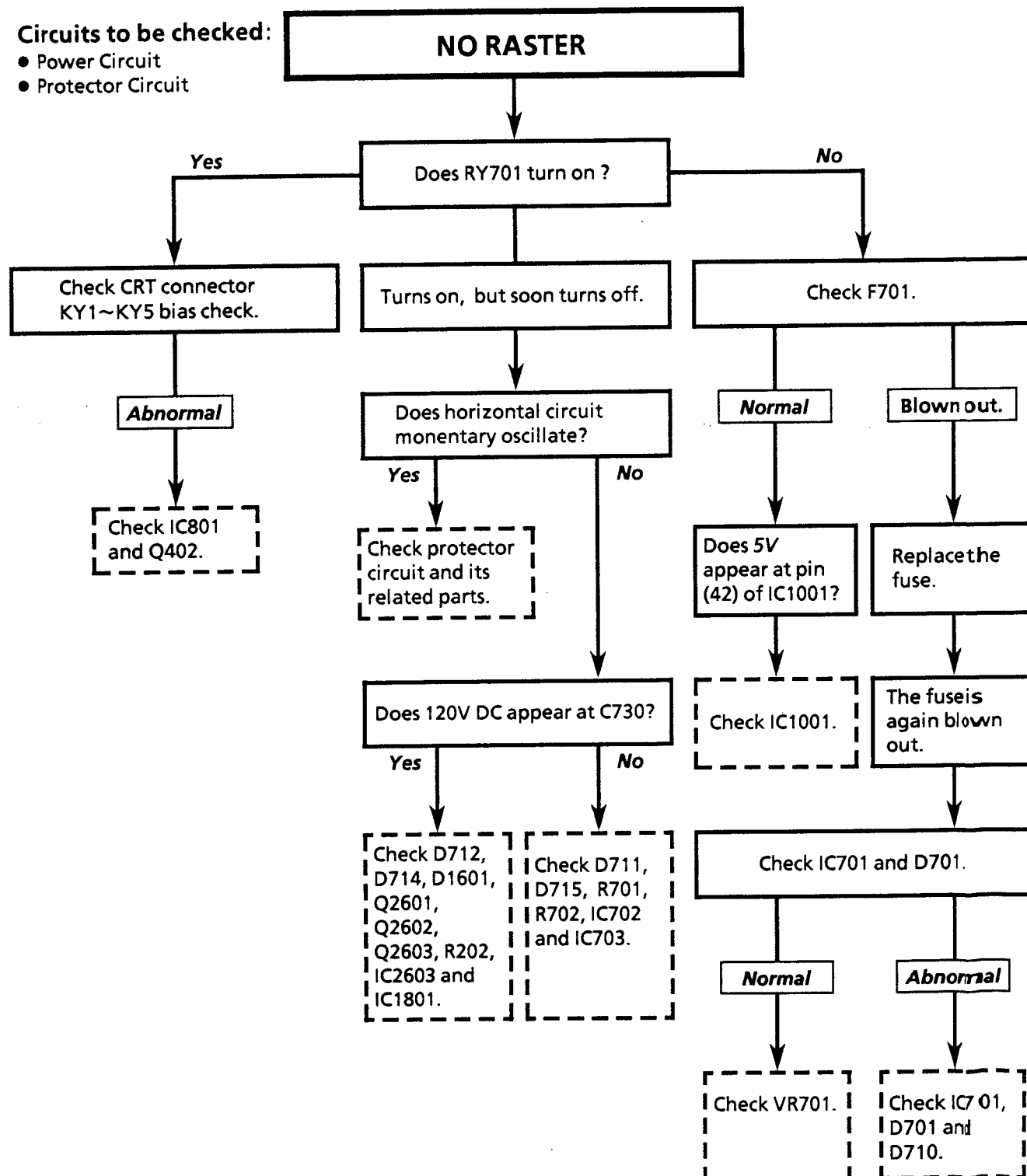
### TINT KEY

1. Receive "NTSC COLOUR BAR" signal.
2. Using the picture select switch, call the tint mode.
3. Use the Up/Down key to make sure the tint on the screen changes: yellowish at Up(+) and reddish at Down(-).

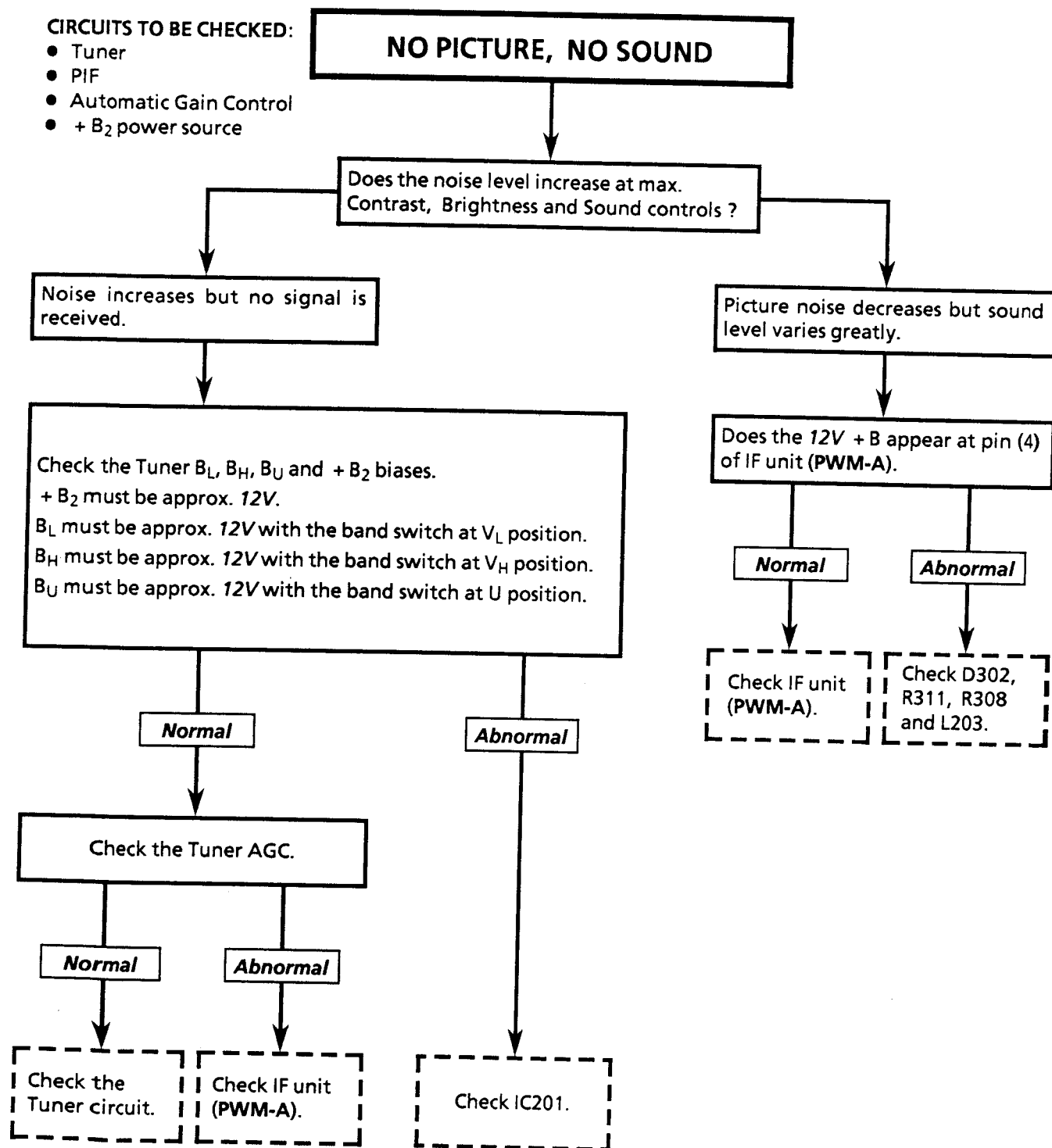
## TROUBLE SHOOTING TABLE

Circuits to be checked:

- Power Circuit
- Protector Circuit



## TROUBLE SHOOTING TABLE (Continued)

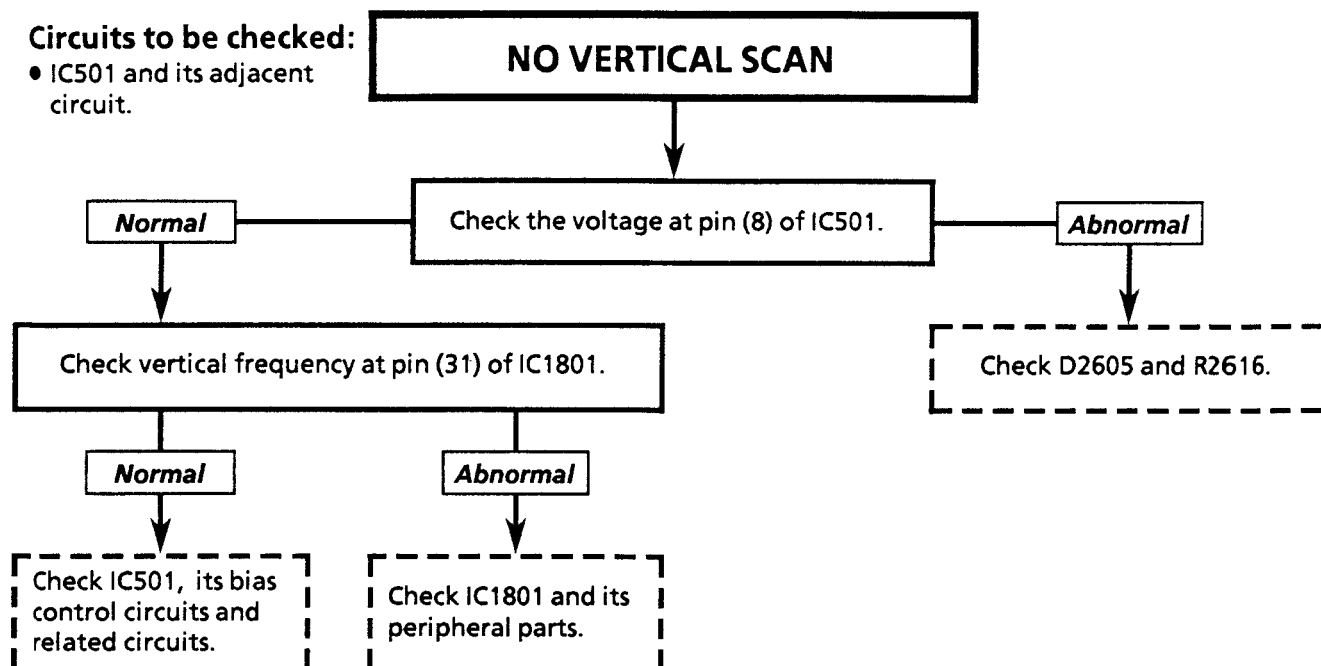




## TROUBLE SHOOTING TABLE (Continued)

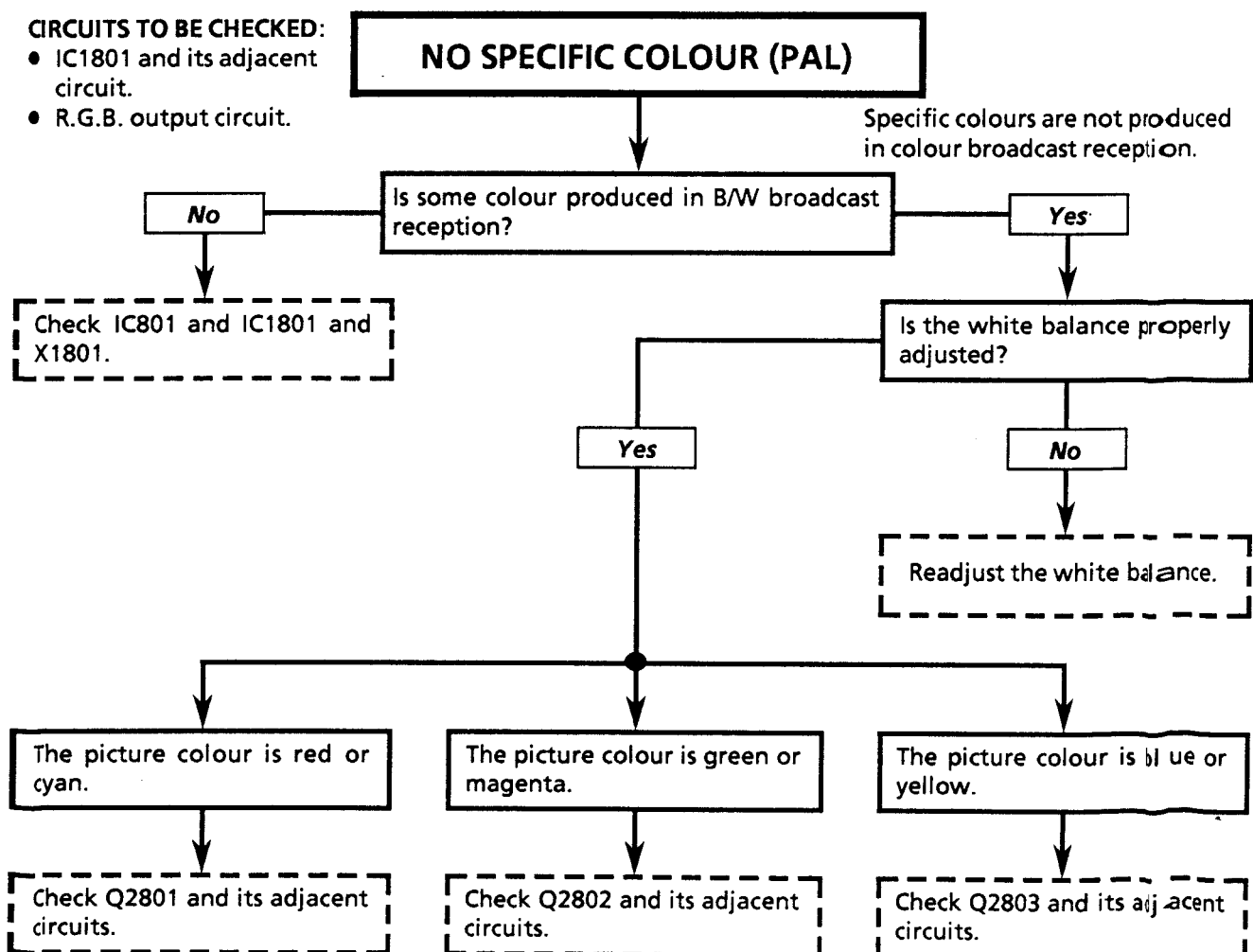
## Circuits to be checked:

- IC501 and its adjacent circuit.



## CIRCUITS TO BE CHECKED:

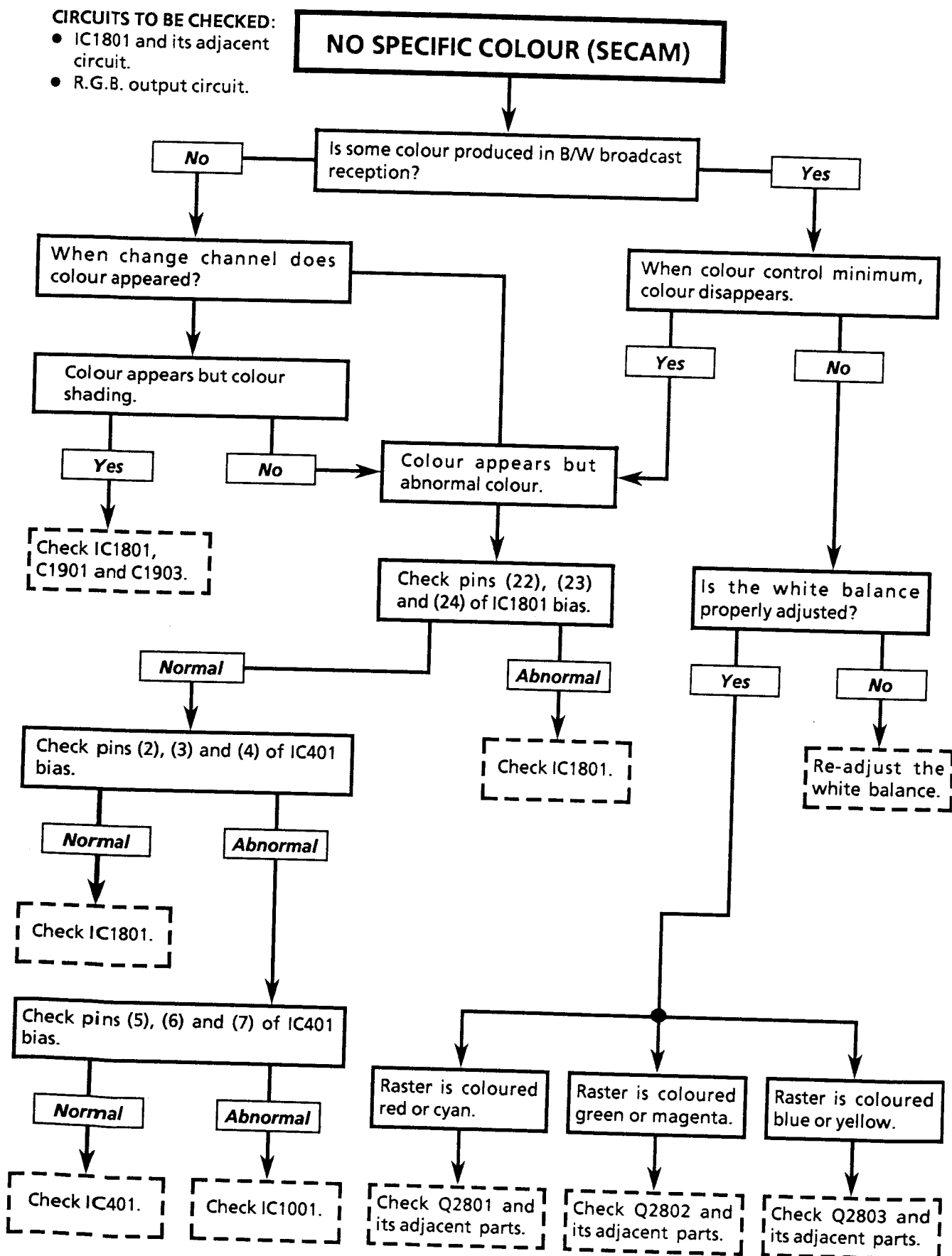
- IC1801 and its adjacent circuit.
- R.G.B. output circuit.



# TROUBLE SHOOTING TABLE (Continued)

## CIRCUITS TO BE CHECKED:

- IC1801 and its adjacent circuit.
- R.G.B. output circuit.



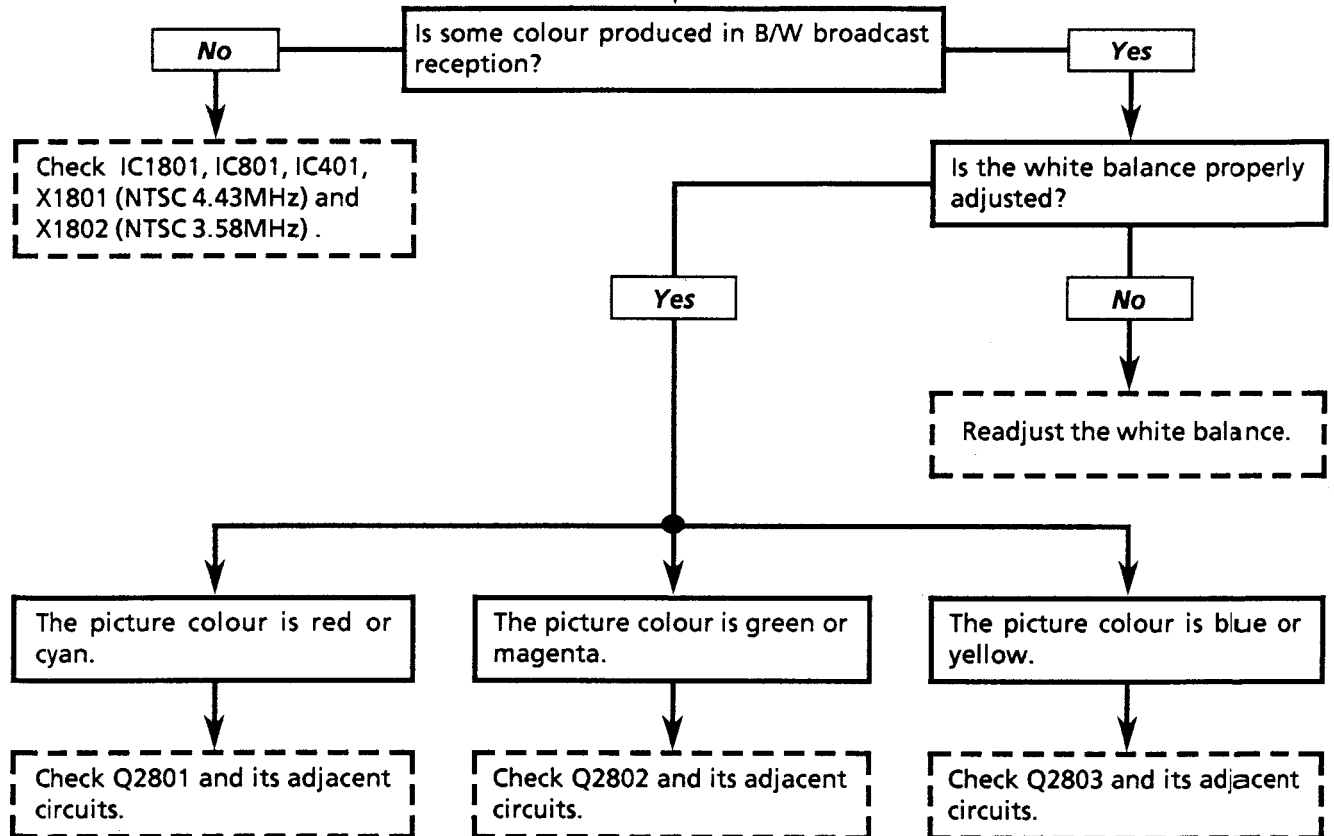
## TROUBLE SHOOTING TABLE (Continued)

## CIRCUITS TO BE CHECKED:

- IC1801 and its adjacent circuit.
- R.G.B. output circuit.

## NO SPECIFIC COLOUR (NTSC)

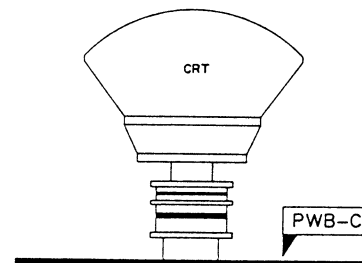
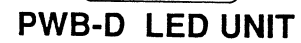
Specific colours are not produced in colour VCR NTSC4.43 reception.



## Memo

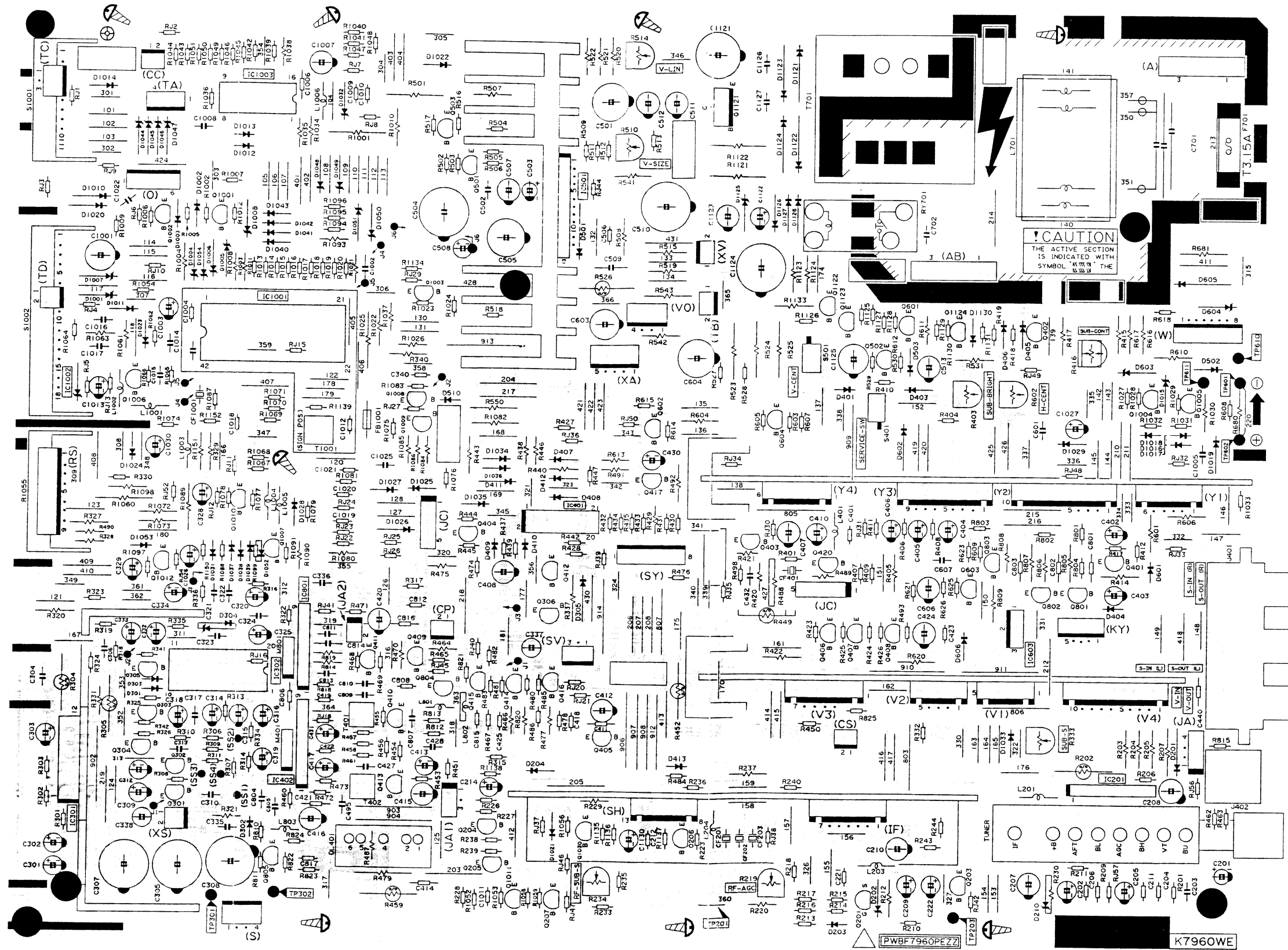
[illegible]

	A
	B
	C
	D
	E
	F
	G
	H



# PRINTED WIRING BOARD ASSEMBLIES

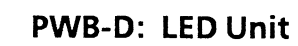
(All the PWBs here are shown as viewed from their wiring sides)



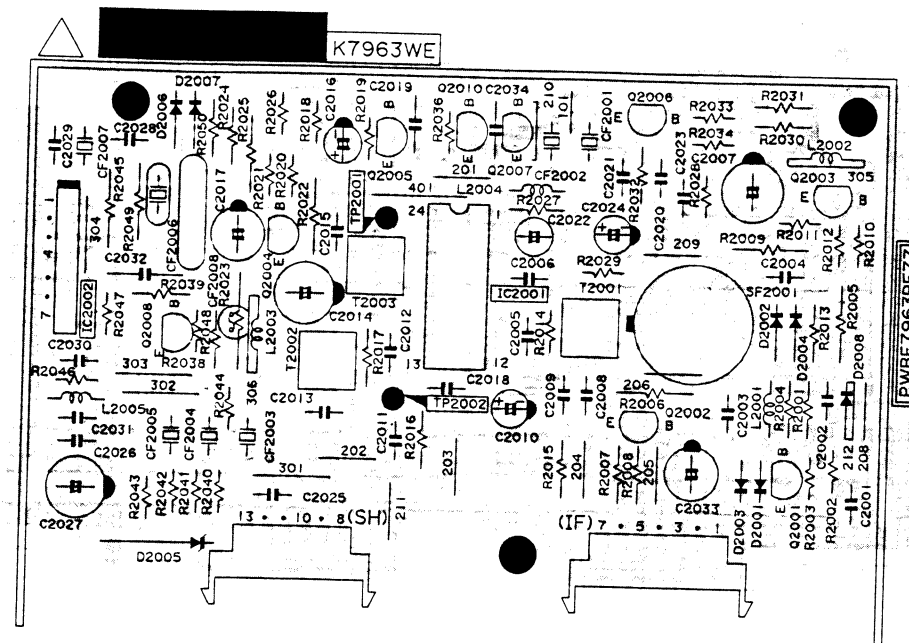
PWB-A: Mother Unit

**25AN1(B)**

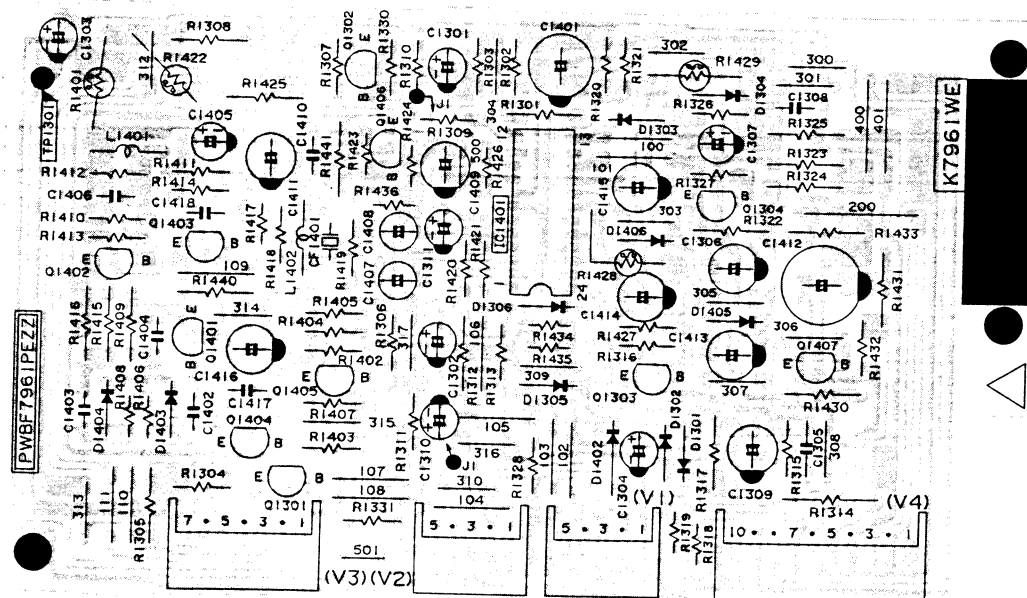




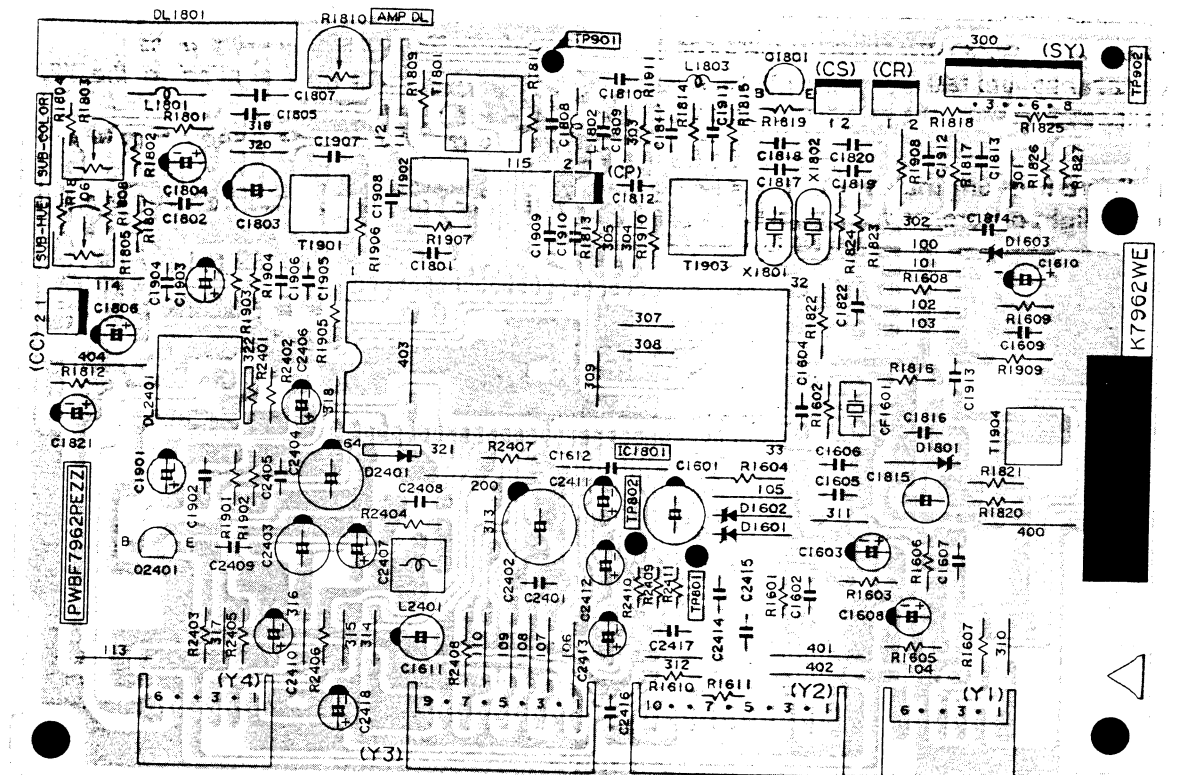




PWM-A: IF Unit



PWM-B: AV Unit



PWM-C: VCI Unit

## DESCRIPTION OF SCHEMATIC DIAGRAM

**SERVICE PRECAUTION:**

The area enclosed by this line ( — — — ) is directly connected with AC Mains Voltage.

When servicing the area, connect an isolating transformer between TV receiver and AC line to eliminate hazard of electric shock.

**PARTS MARKED WITH "△" ( ) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.**

**CAUTION:**

This circuit diagram is original one, therefore there may be a slight difference from yours.

**NOTES:****Voltage Measurement Conditions**

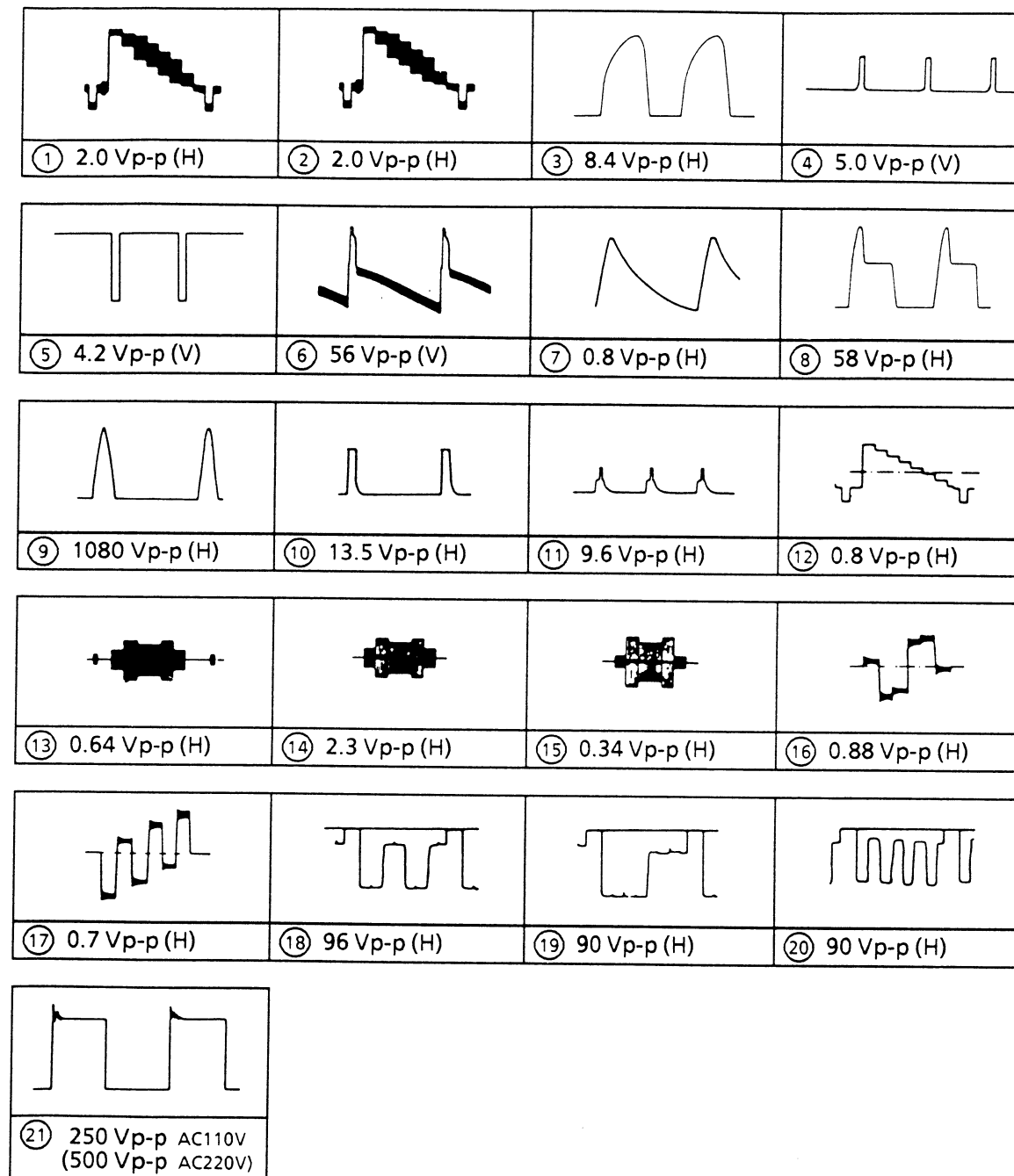
1. The voltage without parenthesis represents the value measured with PAL colour signal.
2. The voltage in parenthesis represents the value measured with no signal.
3. All the voltages were measured by using a high impedance voltmeter.

**Waveform Measurement Conditions**

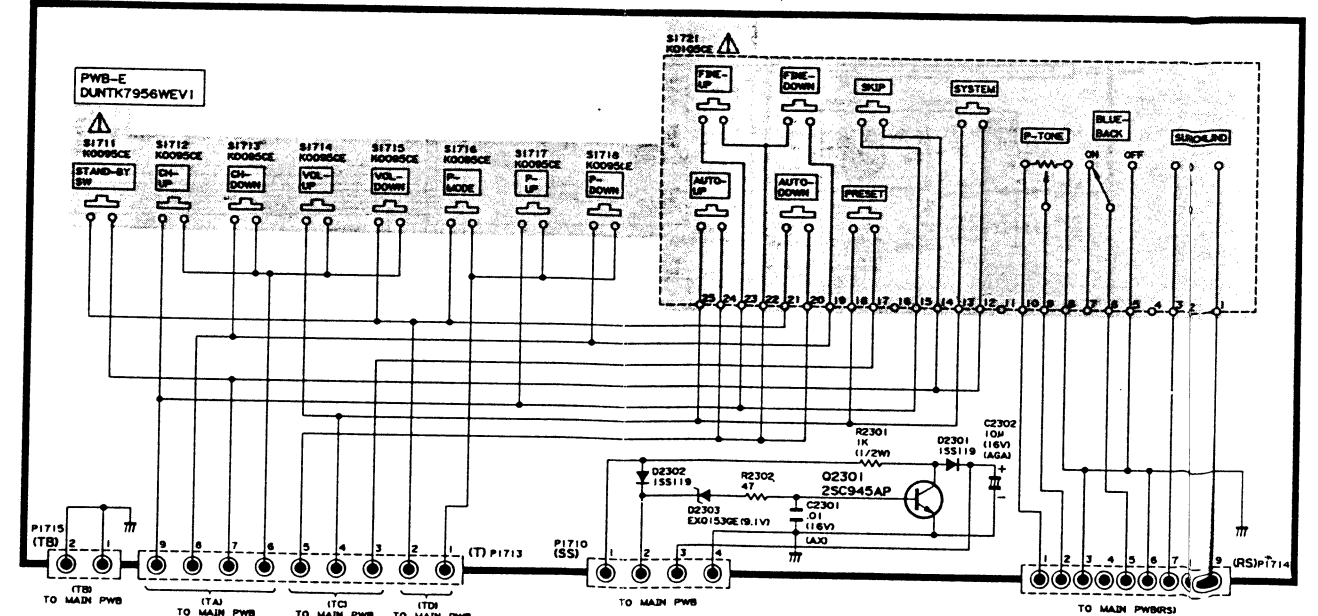
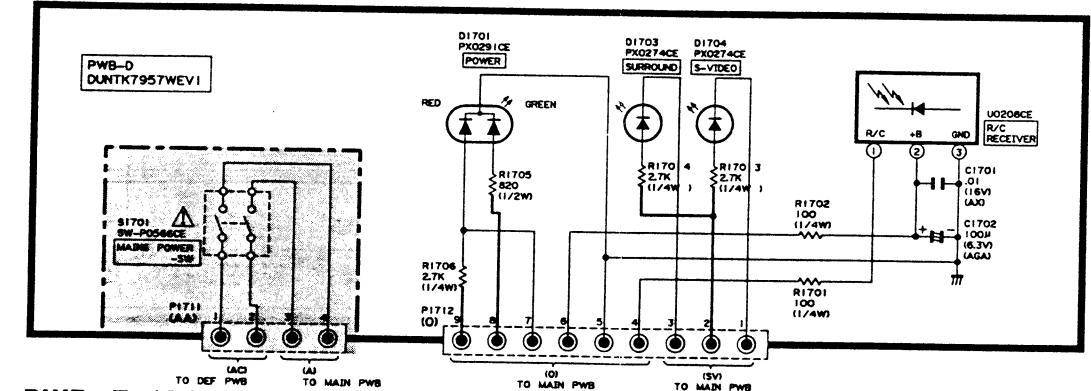
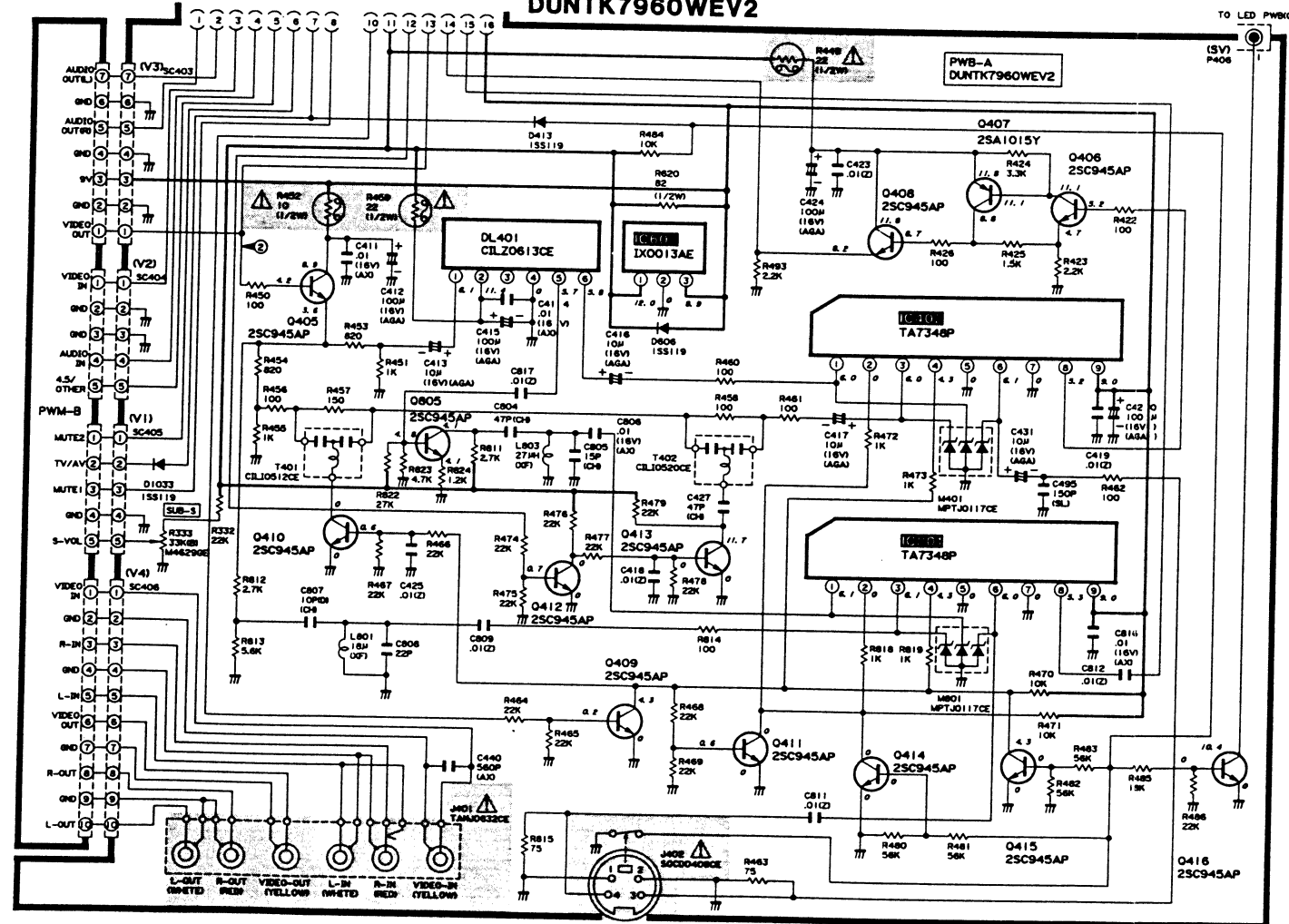
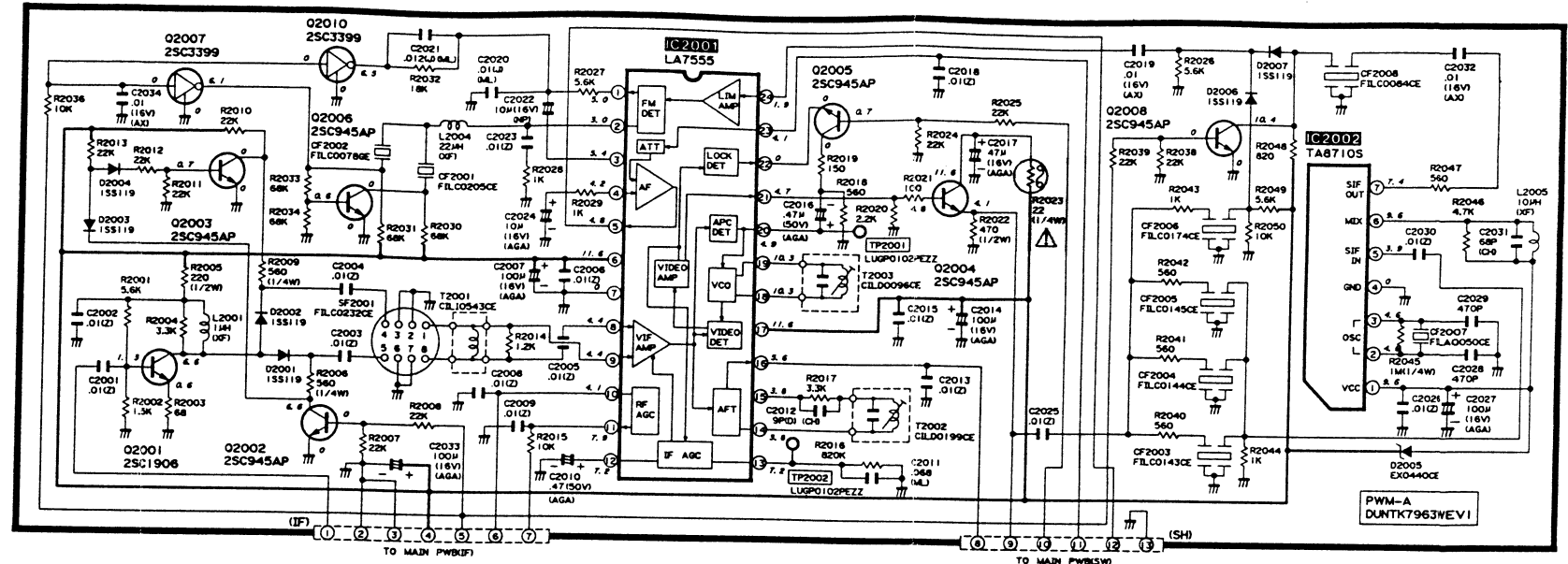
1. The colour bar signal applied to the TP201 is 2.0V peak-to-peak.
2. The tuner AGC voltage is approximately 4V.

All resistors are 1/8W, unless otherwise noted.

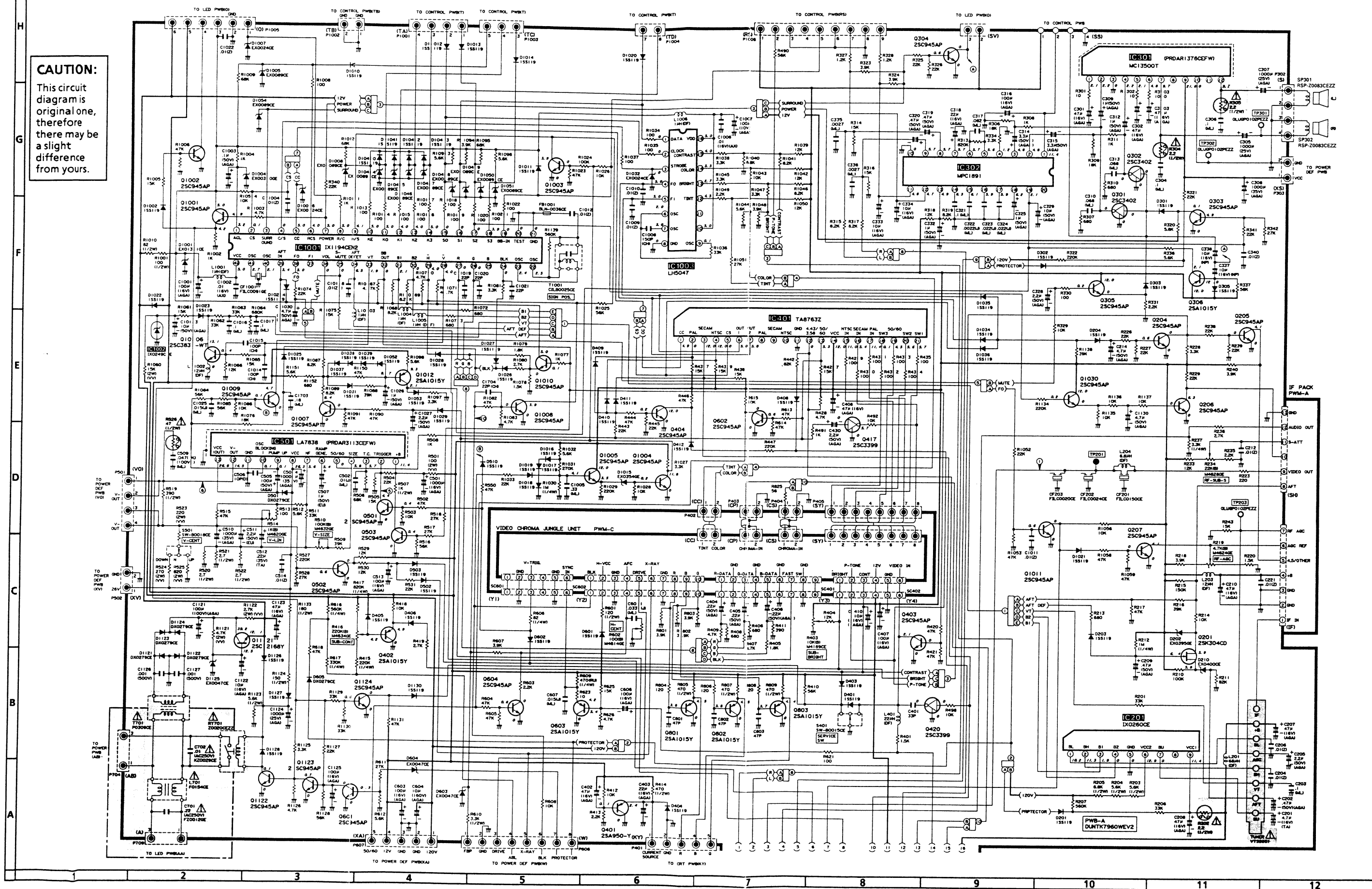
## WAVE FORMS



This circuit diagram is original one, therefore there may be a slight difference from yours.



This circuit diagram is original one, therefore there may be a slight difference from yours.

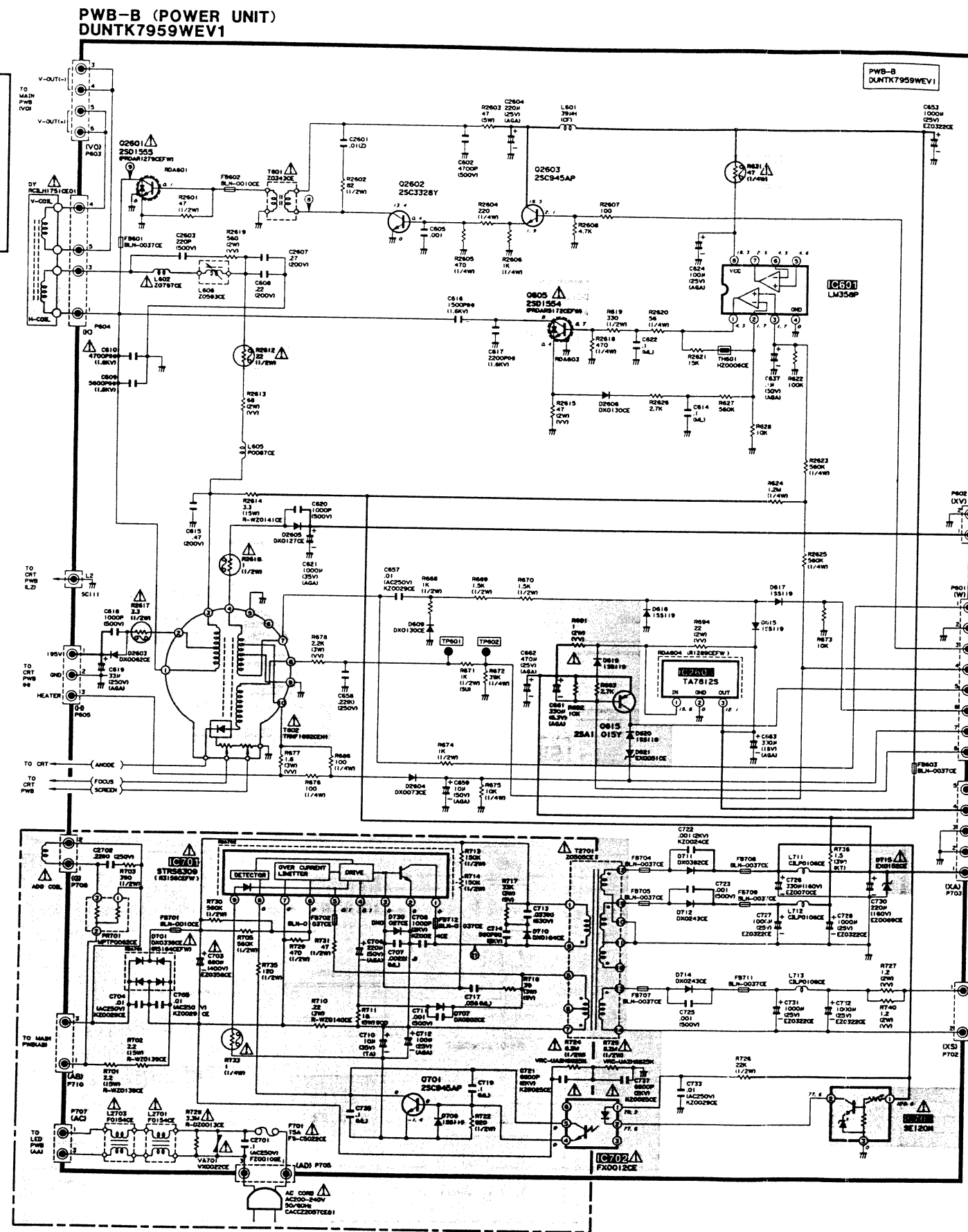




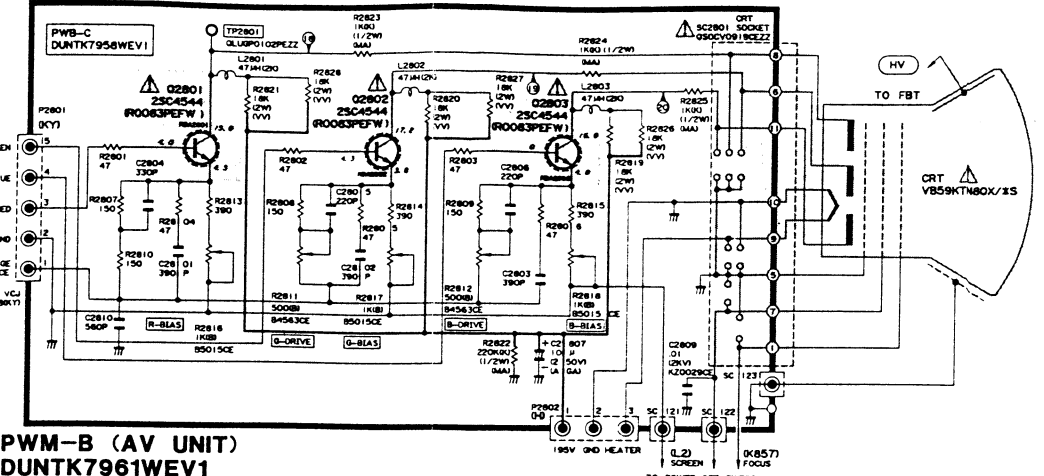
## SCHEMATIC DIAGRAM: Sub Unit

## CAUTION:

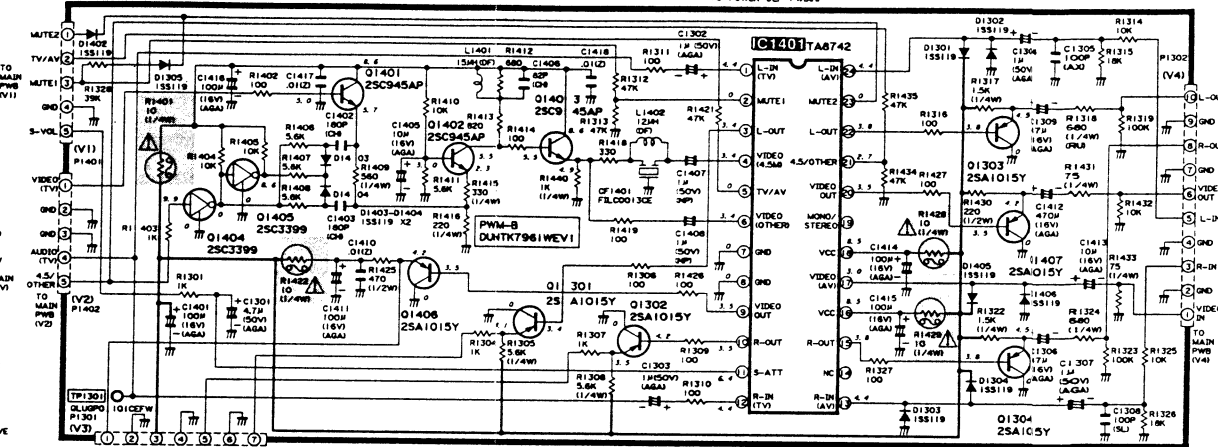
This circuit diagram is original one, therefore there may be a slight difference from yours.



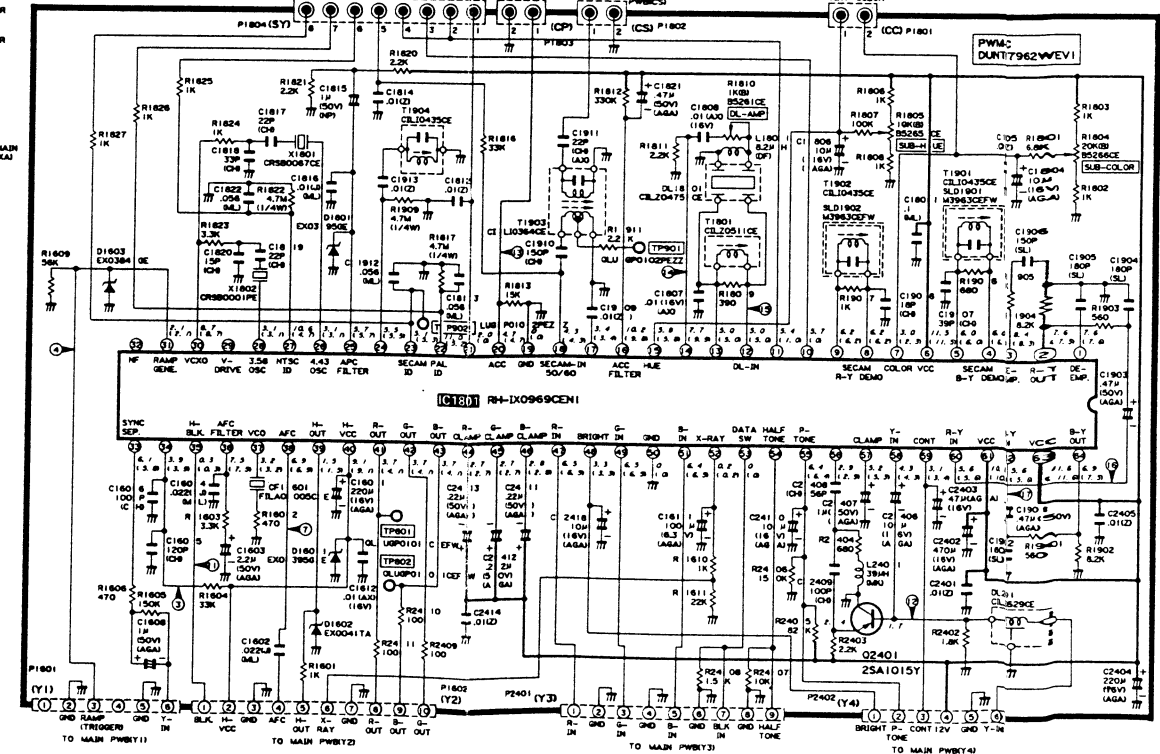
**PWB-C (CRT UNIT)**  
DUNK7958WEV1



**PWM-B (AV UNIT)**  
DUNK7961WEV1

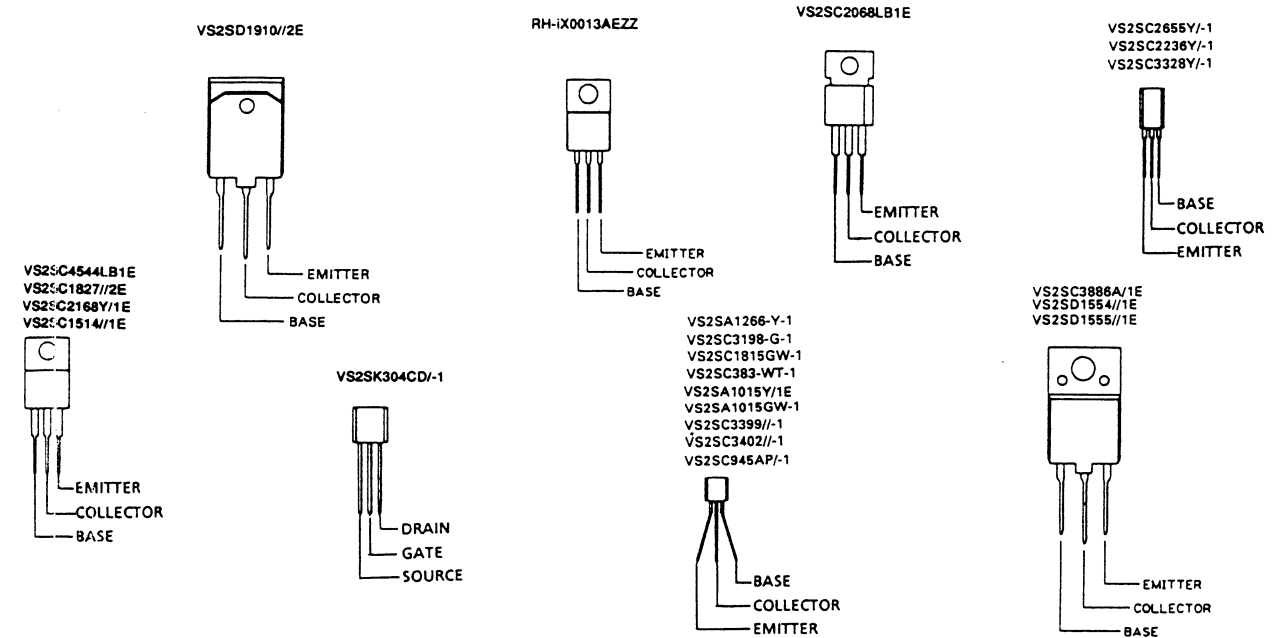


**PWM-C (VIDEO CHROMA JUNGLE UNIT)**  
DUNK7962WEV1



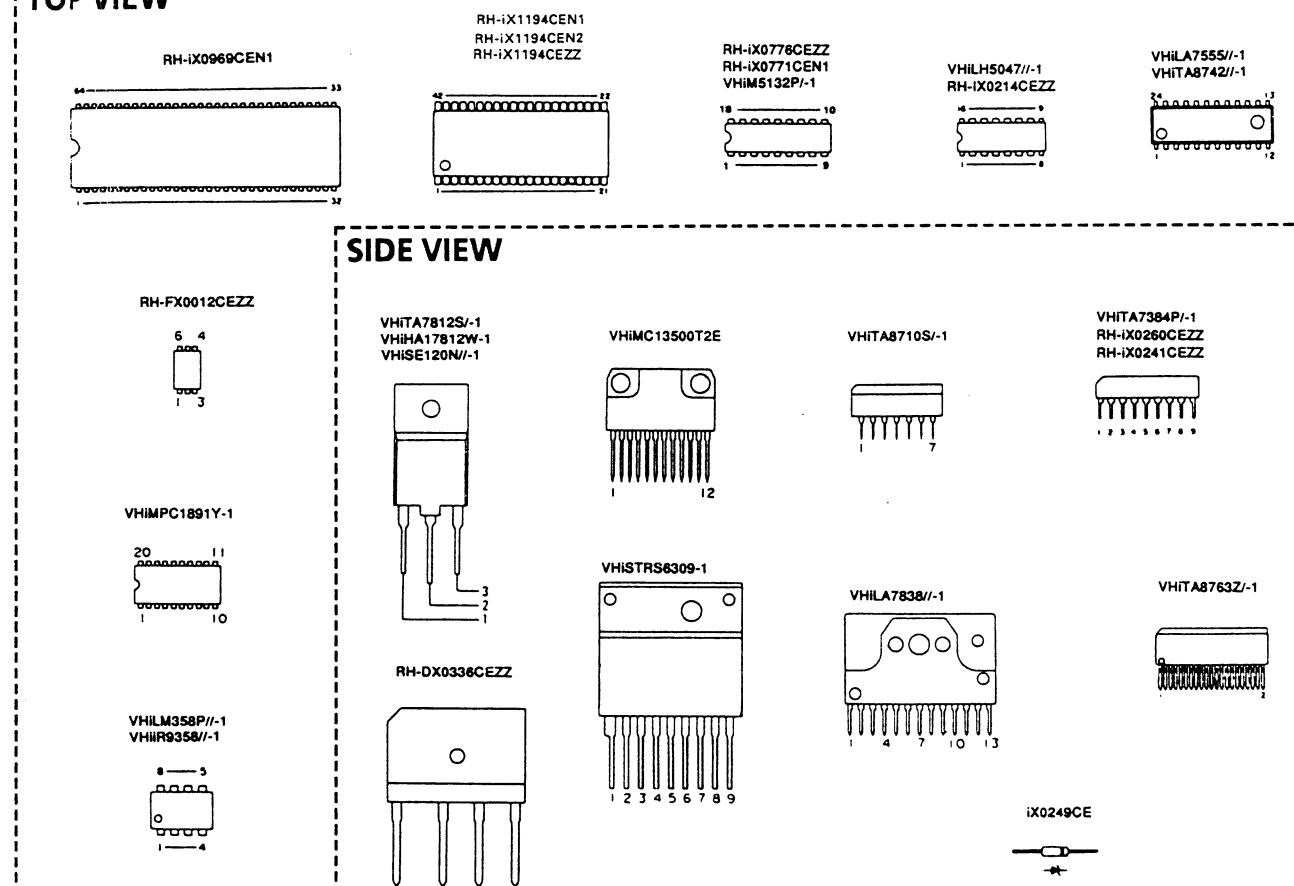
△ VTUVTSS6S1///

## SOLID STATE DEVICE BASE DIAGRAMS

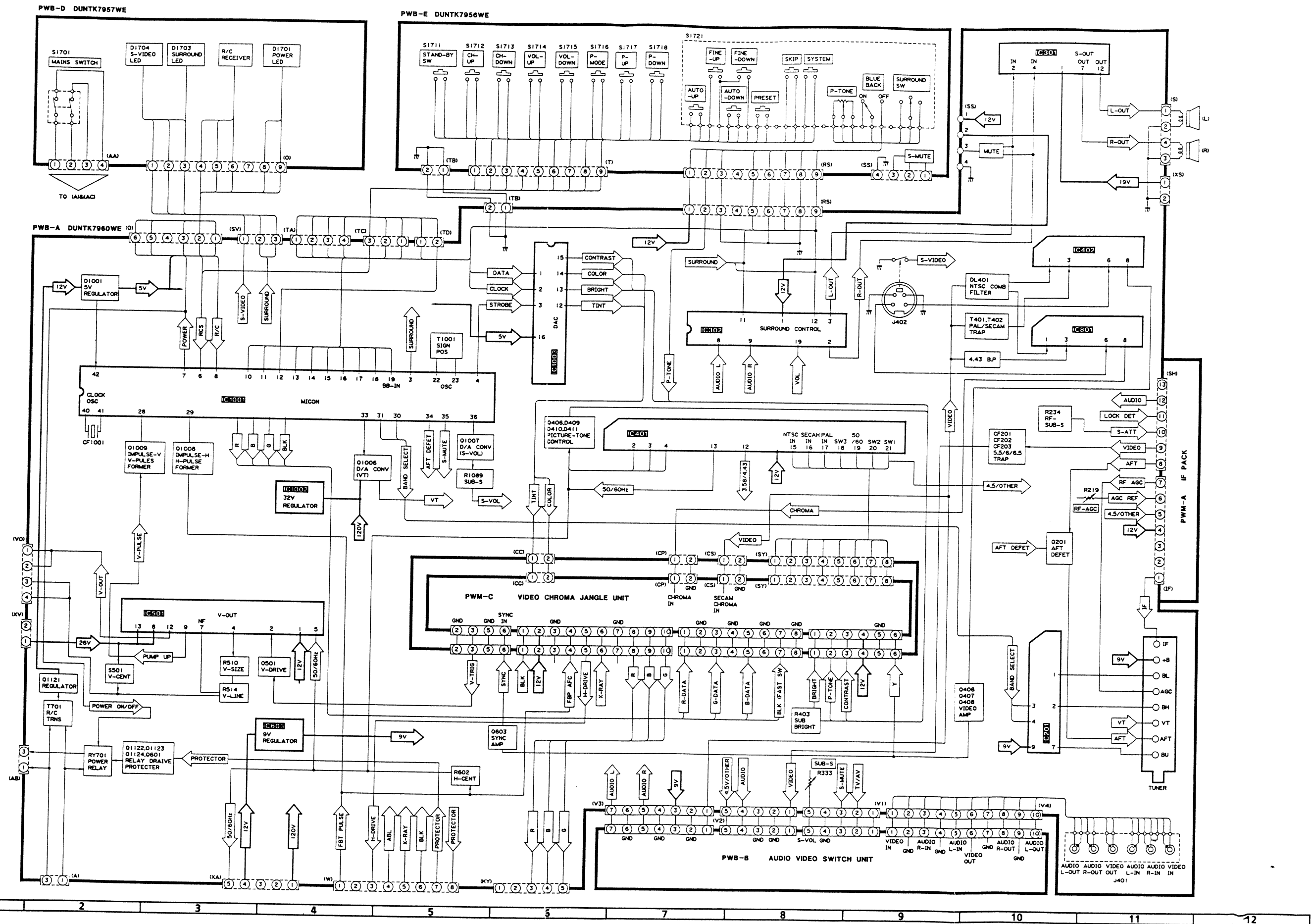


## RRMCG0933PESA

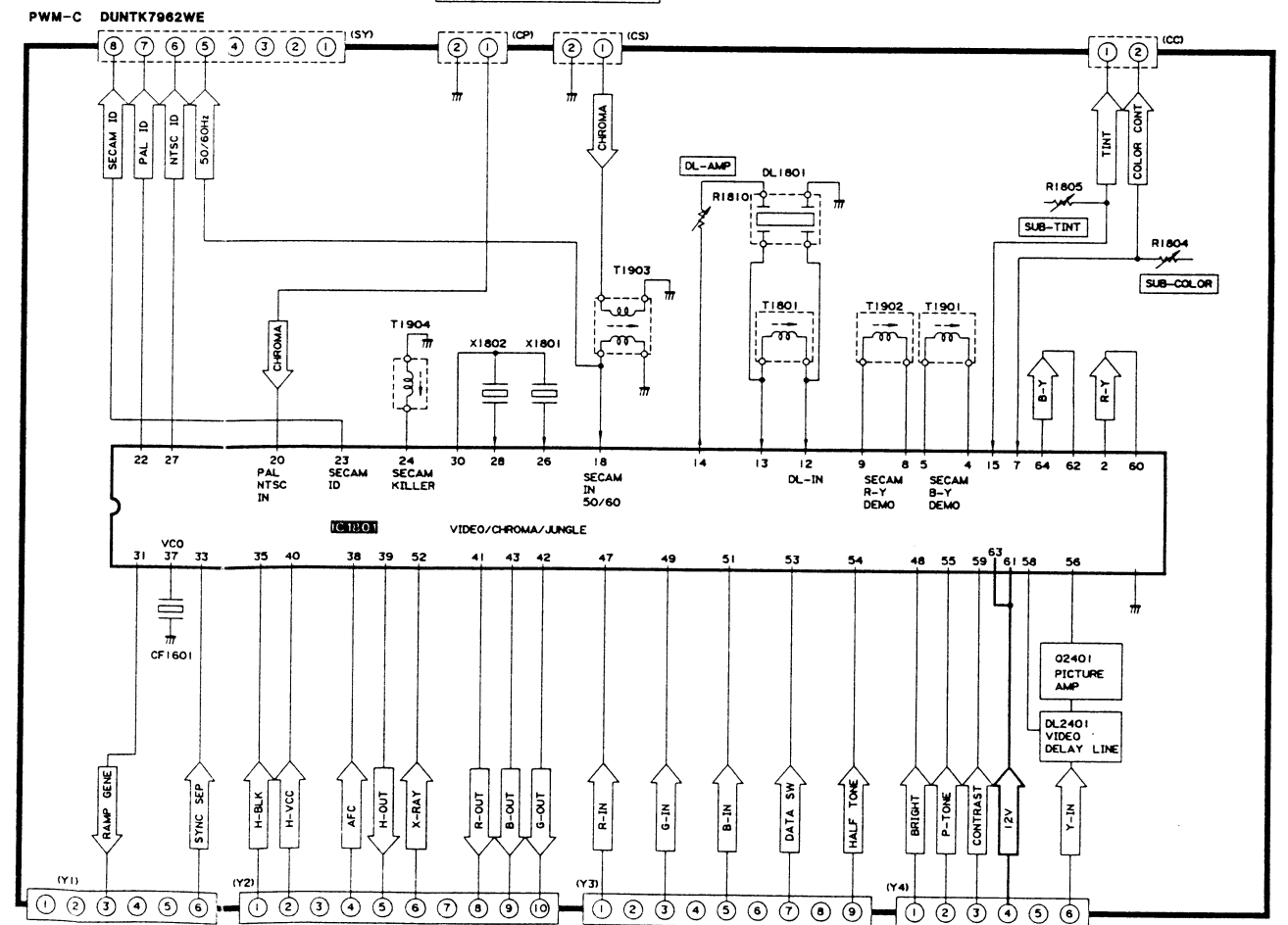
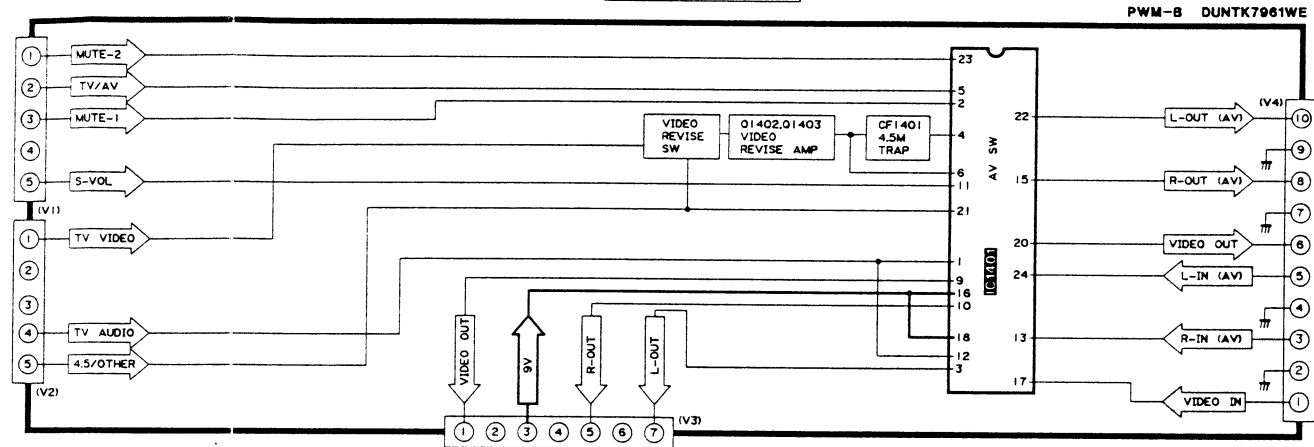
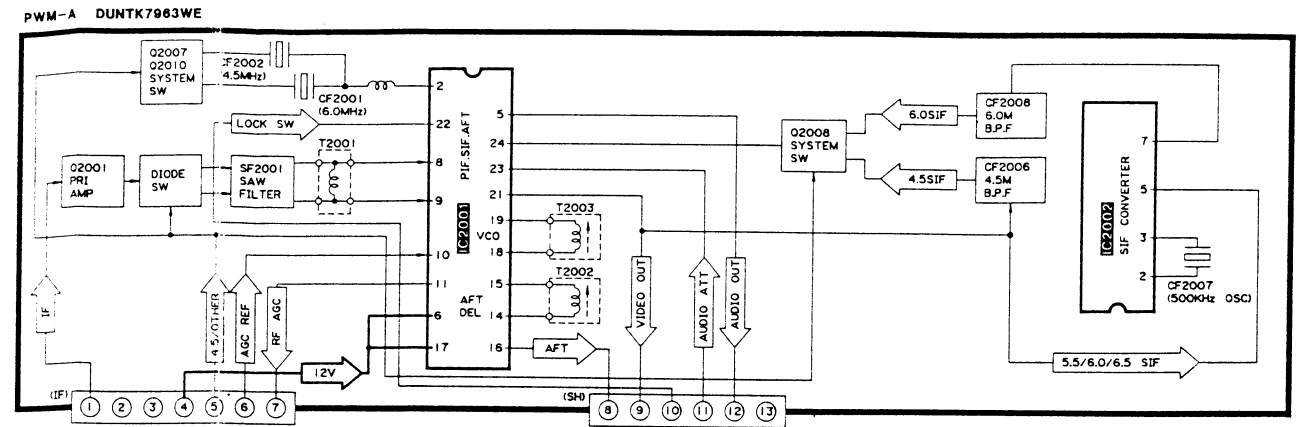
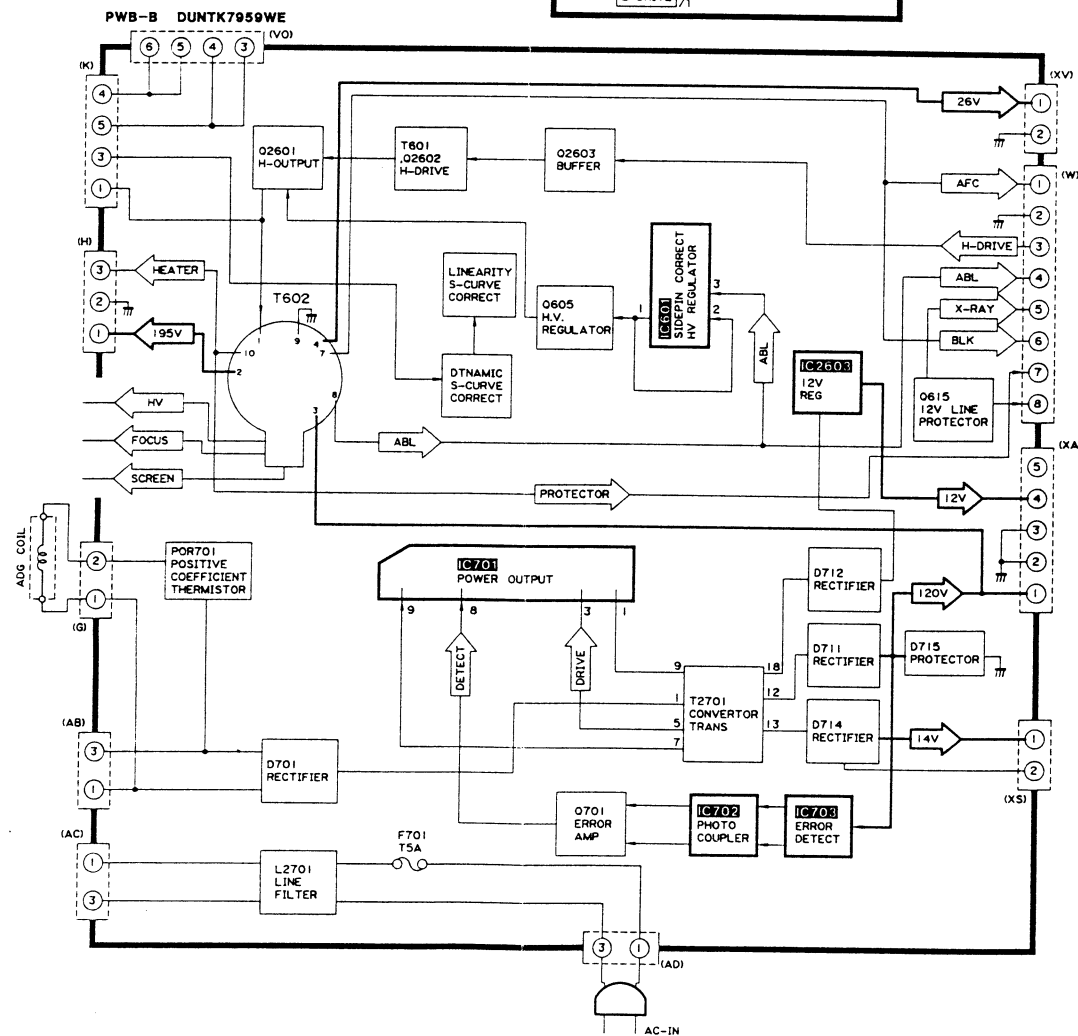
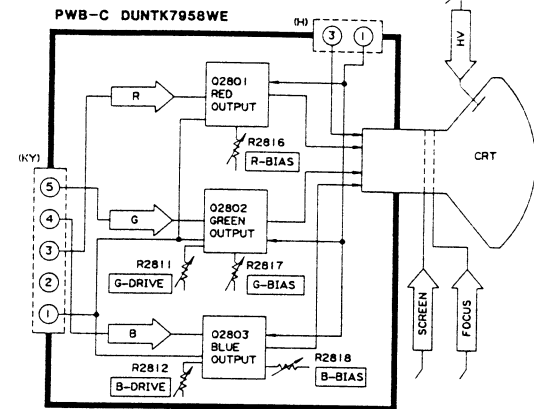
**TOP VIEW**



### BLOCK DIAGRAM : Main Unit



## BLOCK DIAGRAM : Sub Unit





# PARTS LIST

## PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual: electrical components having such features are identified by "△" in the Replacement Parts Lists.

The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

### "HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- |                 |                |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO.    |
| 3. PART NO.     | 4. DESCRIPTION |

MARK ★: SPARE PARTS-DELIVERY SECTION.

Ref. No.	Part No.	★	Description	Code
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## PICTURE TUBE

△ VB1	VB59KTN80X/*S	J	CRT (25")	CR
△ DY	RCILH1751CE01	R	Deflection Yoke	BE
△	RCILG0375CEZZ	J	Degaussing (ADG) Coil	AY
	LHLDC3011CEZZ	J	ADG Coil Holder,	AC
			× 4 used	

— End of PICTURE TUBE —

## PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

PWB-A	DUNTK7960WEV2	-	Mother Unit	—
PWB-B	DUNTK7959WEV1	-	Deflection/Power Unit	—
PWB-C	DUNTK7958WEV1	-	CRT Socket Unit	—
PWB-D	DUNTK7957WEV1	-	LED Unit	—
PWB-E	DUNTK7956WEV1	-	Control Unit	—
PWM-A	DUNTK7963WEV1	-	IF Unit	—
PWM-B	DUNTK7961WEV1	-	AV Unit	—
PWM-C	DUNTK7962WEV1	-	VCI Unit	—

— End of PWB ASSEMBLIES —

Ref. No.	Part No.	★	Description	Code
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## PWB-A DUNTK7960WEV2 MOTHER UNIT

### TUNER

**NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.**

△	VTUVTSS6S1///	J	Tuner, VHF/UHF	BB
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### INTEGRATED CIRCUITS

IC201	RH-IX0260CEZZ	J	LA7910	AF
IC301	VHIMC13500T2E	J	MC13500T2	AN
IC302	VHIMPC1891Y-1	J	C1891ACY	AP
IC401	VHITA8763Z/-1	J	TA8763Z	AM
IC402	VHITA7348P/-1	J	TA7348P	AK
IC501	VHILA7838///-1	J	LA7838	AK
IC603	RH-IX0013AEZZ	J	TA78009AP	AK
IC801	VHITA7348P/-1	J	TA7348P	AK
IC1001	RH-IX1194CEN2	J	LR37906Y	AW
IC1002	RH-IX0249CEZZ	J	HZT33	AE
IC1003	VHILH5047///-1	J	LH5047	AM

### TRANSISTORS

Q201	VS2SK304CD/-1	J	2SK304 (CD)	AC
Q204	VS2SC945AP/-1	J	2SC945AP	AB
Q205	VS2SC945AP/-1	J	2SC945AP	AB
Q206	VS2SC945AP/-1	J	2SC945AP	AB
Q207	VS2SC945AP/-1	J	2SC945AP	AB
Q301	VS2SC3402//1	J	2SC3402	AB
Q302	VS2SC3402//1	J	2SC3402	AB
Q303	VS2SC945AP/-1	J	2SC945AP	AB
Q304	VS2SC945AP/-1	J	2SC945AP	AB
Q305	VS2SC945AP/-1	J	2SC945AP	AB
Q306	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q401	VS2SA950-Y/1E	J	2SA950(Y)	AD
Q402	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q403	VS2SC945AP/-1	J	2SC945AP	AB
Q404	VS2SC945AP/-1	J	2SC945AP	AB
Q405	VS2SC945AP/-1	J	2SC945AP	AB
Q406	VS2SC945AP/-1	J	2SC945AP	AB
Q407	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q408	VS2SC945AP/-1	J	2SC945AP	AB
Q409	VS2SC945AP/-1	J	2SC945AP	AB
Q410	VS2SC945AP/-1	J	2SC945AP	AB
Q411	VS2SC945AP/-1	J	2SC945AP	AB
Q412	VS2SC945AP/-1	J	2SC945AP	AB
Q413	VS2SC945AP/-1	J	2SC945AP	AB
Q414	VS2SC945AP/-1	J	2SC945AP	AB
Q415	VS2SC945AP/-1	J	2SC945AP	AB
Q416	VS2SC945AP/-1	J	2SC945AP	AB
Q417	VS2SC3399//1	J	2SC3399	AB
Q420	VS2SC3399//1	J	2SC3399	AB

Ref. No.	Part No.	*	Description	Code
<b>PWB-A DUNTK7960WEV2</b>				
<b>MOTHER UNIT (Continued)</b>				

**TRANSISTORS (Continued)**

Q501	VS2SC945AP/-1	J	2SC945AP	AB
Q502	VS2SC945AP/-1	J	2SC945AP	AB
Q503	VS2SC945AP/-1	J	2SC945AP	AB
Q601	VS2SC945AP/-1	J	2SC945AP	AB
Q602	VS2SC945AP/-1	J	2SC945AP	AB
Q603	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q604	VS2SC945AP/-1	J	2SC945AP	AB
Q801	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q802	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q803	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q805	VS2SC945AP/-1	J	2SC945AP	AB
Q1001	VS2SC945AP/-1	J	2SC945AP	AB
Q1002	VS2SC945AP/-1	J	2SC945AP	AB
Q1003	VS2SC945AP/-1	J	2SC945AP	AB
Q1004	VS2SC945AP/-1	J	2SC945AP	AB
Q1005	VS2SC945AP/-1	J	2SC945AP	AB
Q1006	VS2SC383-WT-1	J	2SC383 (WT)	AE
Q1007	VS2SC945AP/-1	J	2SC945AP	AB
Q1008	VS2SC945AP/-1	J	2SC945AP	AB
Q1009	VS2SC945AP/-1	J	2SC945AP	AB
Q1010	VS2SC945AP/-1	J	2SC945AP	AB
Q1011	VS2SC945AP/-1	J	2SC945AP	AB
Q1012	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q1030	VS2SC945AP/-1	J	2SC945AP	AB
Q1121	VS2SC2168Y/1E	J	2SC2168 (Y)	AG
Q1122	VS2SC945AP/-1	J	2SC945AP	AB
Q1123	VS2SC945AP/-1	J	2SC945AP	AB
Q1124	VS2SC945AP/-1	J	2SC945AP	AB

**DIODES**

D201	VHD1SS119//1E	J	1SS119	AA
D202	RH-EX0395GEZZ	J	Zener Diode	AA
D203	VHD1SS119//1E	J	1SS119	AA
D204	VHD1SS119//1E	J	1SS119	AA
D210	RH-EX0400CEZZ	J	Zener Diode	AC
D301	VHD1SS119//1E	J	1SS119	AA
D302	VHD1SS119//1E	J	1SS119	AA
D303	VHD1SS119//1E	J	1SS119	AA
D305	VHD1SS119//1E	J	1SS119	AA
D401	VHD1SS119//1E	J	1SS119	AA
D403	VHD1SS119//1E	J	1SS119	AA
D404	VHD1SS119//1E	J	1SS119	AA
D405	VHD1SS119//1E	J	1SS119	AA
D406	VHD1SS119//1E	J	1SS119	AA
D408	VHD1SS119//1E	J	1SS119	AA
D409	VHD1SS119//1E	J	1SS119	AA
D410	VHD1SS119//1E	J	1SS119	AA
D411	VHD1SS119//1E	J	1SS119	AA

Ref. No.	Part No.	*	Description	Code
<b>DIODES (Continued)</b>				

D412	VHD1SS119//1E	J	1SS119	AA
D413	VHD1SS119//1E	J	1SS119	AA
D501	RH-DX0279CEZZ	J		AB
D502	VHD1SS119//1E	J	1SS119	AA
D503	VHD1SS119//1E	J	1SS119	AA
D510	VHD1SS119//1E	J	1SS119	AA
D601	VHD1SS119//1E	J	1SS119	AA
D602	VHD1SS119//1E	J	1SS119	AA
D603	RH-EX0047CEZZ	J	Zener Diode	AB
D604	RH-EX0047CEZZ	J	Zener Diode	AB
D605	RH-DX0279CEZZ	J		AB
D606	VHD1SS119//1E	J	1SS119	AA
D1001	RH-EX0131CEZZ	J	Zener Diode	AB
D1002	VHD1SS119//1E	J	1SS119	AA
D1004	RH-EX0030GEZZ	J	Zener Diode	AB
D1005	RH-EX0089CEZZ	J	Zener Diode	AB
D1006	RH-EX0024CEZZ	J	Zener Diode	AB
D1007	RH-EX0024CEZZ	J	Zener Diode	AB
D1008	RH-EX0089CEZZ	J	Zener Diode	AB
D1010	VHD1SS119//1E	J	1SS119	AA
D1011	VHD1SS119//1E	J	1SS119	AA
D1012	VHD1SS119//1E	J	1SS119	AA
D1013	VHD1SS119//1E	J	1SS119	AA
D1014	VHD1SS119//1E	J	1SS119	AA
D1015	RH-EX0354GEZZ	J	Zener Diode	AA
D1016	VHD1SS119//1E	J	1SS119	AA
D1017	VHD1SS119//1E	J	1SS119	AA
D1018	VHD1SS119//1E	J	1SS119	AA
D1019	VHD1SS119//1E	J	1SS119	AA
D1020	VHD1SS119//1E	J	1SS119	AA
D1021	VHD1SS119//1E	J	1SS119	AA
D1022	VHD1SS119//1E	J	1SS119	AA
D1023	VHD1SS119//1E	J	1SS119	AA
D1024	VHD1SS119//1E	J	1SS119	AA
D1025	VHD1SS119//1E	J	1SS119	AA
D1026	VHD1SS119//1E	J	1SS119	AA
D1027	VHD1SS119//1E	J	1SS119	AA
D1028	VHD1SS119//1E	J	1SS119	AA
D1029	VHD1SS119//1E	J	1SS119	AA
D1031	VHD1SS119//1E	J	1SS119	AA
D1032	RH-EX0024CEZZ	J	Zener Diode	AB
D1033	VHD1SS119//1E	J	1SS119	AA
D1034	VHD1SS119//1E	J	1SS119	AA
D1035	VHD1SS119//1E	J	1SS119	AA
D1036	VHD1SS119//1E	J	1SS119	AA
D1037	VHD1SS119//1E	J	1SS119	AA
D1038	VHD1SS119//1E	J	1SS119	AA
D1039	VHD1SS119//1E	J	1SS119	AA
D1040	VHD1SS119//1E	J	1SS119	AA
D1041	VHD1SS119//1E	J	1SS119	AA
D1042	VHD1SS119//1E	J	1SS119	AA
D1043	VHD1SS119//1E	J	1SS119	AA
D1044	RH-EX0089CEZZ	J	Zener Diode	A3
D1045	RH-EX0089CEZZ	J	Zener Diode	A3

Ref. No.	Part No.	*	Description	Code	Ref. No.	Part No.	*	Description	Code
<b>PWB-A DUNTK7960WEV2 MOTHER UNIT (Continued)</b>					<b>COILS AND TRANSFORMERS (Continued)</b>				
<b>DIODES (Continued)</b>					T402	RCiLi0520CEZZ	J	Coil, 3.58 MHz Trap	AE
D1046	RH-EX0089CEZZ	J	Zener Diode	AB	△ T701	RTRNP0309CEZZ	J	R/C Back-Up Trans.	AS
D1047	RH-EX0089CEZZ	J	Zener Diode	AB	T1001	RCiLB0025CEZZ	R	Coil, O.S.D. Oscillator	AD
D1048	RH-EX0089CEZZ	J	Zener Diode	AB	<b>CONTROLS</b>				
D1049	RH-EX0089CEZZ	J	Zener Diode	AB	R219	RVR-M4624GEZZ	J	4.7k(B) RF-AGC	AB
D1050	RH-EX0089CEZZ	J	Zener Diode	AB	R234	RVR-M4628GEZZ	J	22k(B) RF-Sub-Sound	AB
D1051	RH-EX0089CEZZ	J	Zener Diode	AB	R333	RVR-M4629GEZZ	J	33k(B) Sub-Sound	AB
D1052	VHD1SS119//1E	J	1SS119	AA	R403	RVR-M4189CEZZ	J	10k(B) Sub-Brightness	AC
D1053	VHD1SS119//1E	J	1SS119	AA	R416	RVR-M4634GEZZ	J	220k(B) Sub-Contrast	AC
D1054	RH-EX0089CEZZ	J	Zener Diode	AB	R510	RVR-M4632GEZZ	J	100k(B) Vertical Size	AB
D1121	RH-DX0279CEZZ	J		AB	R514	RVR-M4620GEZZ	J	1k(B) Vertical Line.	AB
D1122	RH-DX0279CEZZ	J		AB	R602	RVR-M4614GEZZ	J	100(B) Horiz. -Center	AB
D1123	RH-DX0279CEZZ	J		AB	<b>CAPACITORS</b>				
D1124	RH-DX0279CEZZ	J		AB	C201	VCSATA1CE475K	J	4.7 16V Tantalum	AC
D1125	RH-EX0047CEZZ	J	Zener Diode	AB	C202	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
D1126	VHD1SS119//1E	J	1SS119	AA	C203	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
D1127	VHD1SS119//1E	J	1SS119	AA	C204	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
D1128	VHD1SS119//1E	J	1SS119	AA	C205	VCEAGA1HW225M	J	2.2 50V Electrolytic	AB
D1130	VHD1SS119//1E	J	1SS119	AA	C206	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
<b>PACKAGED CIRCUITS</b>					C207	VCEAGA1CW476M	J	47 16V Electrolytic	AB
M401	RMPTJ0117CEZZ	J	Diode Array	AD	C208	VCEAGA1CW476M	J	47 16V Electrolytic	AB
M801	RMPTJ0117CEZZ	J	Diode Array	AD	C209	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
<b>COILS AND TRANSFORMERS</b>					C210	VCEAGA1CW476M	J	47 16V Electrolytic	AB
CF201	RFiLC0150CEZZ	J	Ceramic Filter, 5.5 MHz / 6.0 MHz Trap	AF	C212	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
CF202	RFiLC0024CEZZ	J	Ceramic Filter, 6.5 MHz Trap	AE	C214	VCEAGA1HW475M	J	4.7 50V Electrolytic	AB
CF203	RFiLC0020CEZZ	J	Ceramic Filter, 5.5 MHz Trap	AE	C221	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
CF1001	RFiLC0091GEZZ	J	Ceramic Filter, 4 MHz Osc.	AD	C301	VCEAGA1CW476M	J	47 16V Electrolytic	AB
DL401	RFiLZ0613CEZZ	J	Comb. Filter	AT	C302	VCEAGA1CW476M	J	47 16V Electrolytic	AB
L201	VP-DF680K0000	J	Coil, 68 $\mu$ H	AB	C303	VCEAGA1CW476M	J	47 16V Electrolytic	AB
L203	VP-DF120K0000	J	Coil, 12 $\mu$ H	AB	C304	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
L204	VP-DF6R8K0000	J	Coil, 6.8 $\mu$ H	AB	C305	VCEAGA1EW108M	J	1000 25V Electrolytic	AD
L401	VP-DF220K0000	J	Coil, 22 $\mu$ H	AB	C306	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
△ L701	RCiLF0154CEZZ	J	Coil, Line Filter	AQ	C307	VCEAGA1EW108M	J	1000 25V Electrolytic	AD
L801	VP-XF180K0000	J	Coil, 18 $\mu$ H	AB	C308	VCEAGA1VW108M	J	1000 35V Electrolytic	AD
L803	VP-XF270K0000	J	Coil, 27 $\mu$ H	AB	C309	VCEAGA1HW105M	J	1 50V Electrolytic	AC
L1001	VP-DF1R0K0000	J	Coil, 1 $\mu$ H	AB	C310	VCFYHA1HA683J	J	0.068 50V M. Polyester	AC
L1002	VP-DF120K0000	J	Coil, 12 $\mu$ H	AB	C312	VCEAGA1HW105M	J	1 50V Electrolytic	AC
L1003	VP-DF1R0K0000	J	Coil, 1 $\mu$ H	AB	C313	VCFYHA1HA683J	J	0.068 50V M. Polyester	AC
L1004	VP-DF1R0K0000	J	Coil, 1 $\mu$ H	AB	C314	VCEAGA1HW335M	J	3.3 50V Electrolytic	AB
L1005	VP-DF1R0K0000	J	Coil, 1 $\mu$ H	AB	C315	VCEAGA1HW335M	J	3.3 50V Electrolytic	AB
L1006	VP-DF1R0K0000	J	Coil, 1 $\mu$ H	AB	C316	VCEAGA1CW107M	J	100 16V Electrolytic	AB
T401	RCiLi0512CEZZ	J	Coil, 4.43 MHz Trap	AE	C317	VCFYHA1HA823J	J	0.082 50V M. Polyester	AA
					C318	VCEAGA1CW226M	J	22 16V Electrolytic	AB
					C319	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
					C320	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
					C321	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
					C322	VCQYTA1HM222J	J	2200p50V Mylar	AA
					C323	VCQYTA1HM223J	J	0.022 50V Mylar	AA

Ref. No.	Part No.	*	Description	Code
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# PWB-A DUNTK7960WEV2 MOTHER UNIT (Continued)

## CAPACITORS (Continued)

C324	VCQYTA1HM223J	J	0.022 50V Mylar	AA
C325	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C328	VCEAGA1HW225M	J	2.2 50V Electrolytic	AB
C329	VCEAGA1HW106M	J	10 50V Electrolytic	AC
C332	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C333	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C334	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C335	VCQYTA1HM272J	J	2700p50V Mylar	AA
C336	VCQYTA1HM272J	J	2700p50V Mylar	AA
C337	VCE9GA1CW106M	J	10 16V Elect. (N.P)	AB
C338	VCE9GA1CW106M	J	10 16V Elect. (N.P)	AB
C340	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C401	VCCSPA1HL330J	J	33p 50V Ceramic	AA
C402	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C403	VCEAGA1CW226M	J	22 16V Electrolytic	AB
C404	VCEAGA1HW224M	J	0.22 50V Electrolytic	AB
C405	VCEAGA1HW224M	J	0.22 50V Electrolytic	AB
C406	VCEAGA1HW224M	J	0.22 50V Electrolytic	AB
C407	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C408	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C410	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C411	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C412	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C413	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C414	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C415	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C416	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C417	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C418	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C419	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C420	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C423	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C424	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C425	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C427	VCCCPA1HH470J	J	47p 50V Ceramic	AA
C430	VCEAGA1HW225M	J	2.2 50V Electrolytic	AB
C431	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C440	VCKYD41HB561K	J	560p 50V Ceramic	AA
C495	VCCSPA1HL151J	J	150p 50V Ceramic	AA
C501	VCEAGA1CW108M	J	1000 16V Electrolytic	AD
C502	VCQYTA1HM103J	J	0.01 50V Mylar	AA
C504	VCEAGA1VW108M	J	1000 35V Electrolytic	AD
C505	VCEAGA1HW107M	J	100 50V Electrolytic	AC
C506	VCCCPA1HH100D	J	10p 50V Ceramic	AA
C507	VCEACA1HC105M	J	1 50V Electrolytic	AC
C509	VCQYSG2AA473K	J	0.047 100V Mylar	AC
C510	VCEAGA1VW108M	J	1000 35V Electrolytic	AD
C511	VCEACA1HC225M	J	2.2 50V Electrolytic	AC
C512	VCSATA1VE224K	J	0.22 35V Tantalum	AC
C513	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C514	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA

Ref. No.	Part No.	*	Description	Code
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## CAPACITORS (Continued)

C601	VCQYTA1HM333J	J	0.033 50V Mylar	AA
C603	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C604	VCEAGA2CW106M	J	10 160V Electrolytic	AC
C606	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C607	VCQYTA1HM153J	J	0.015 50V Mylar	AA
△C701	RC-FZ0012GEZZ	J	0.22 AC250V M. Polyester	AE
△C702	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
C801	VCCSD41HL470J	J	47p 50V Ceramic	AA
C802	VCCSD41HL470J	J	47p 50V Ceramic	AA
C803	VCCSD41HL470J	J	47p 50V Ceramic	AA
C804	VCCCPA1HH470J	J	47p 50V Ceramic	AA
C805	VCCCPA1HH150J	J	15p 50V Ceramic	AA
C806	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C807	VCCCPA1HH100D	J	10p 50V Ceramic	AA
C808	VCCSPA1HL220J	J	22p 50V Ceramic	AA
C809	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C811	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C812	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C816	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C817	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1001	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C1002	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C1003	VCEAGA1HW104M	J	0.1 50V Electrolytic	AA
C1004	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1005	VCFYHA1HA334J	J	0.33 50V M. Polyester	AC
C1006	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C1007	VCEAGA1AW107M	J	100 10V Electrolytic	AB
C1008	VCCCPA1HH151J	J	150p 50V Ceramic	AA
C1009	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1010	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1011	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1012	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1013	VCEAGA1HW106M	J	10 50V Electrolytic	AC
C1014	VCCCPA1HH101J	J	100p 50V Ceramic	AA
C1015	VCCCPA1HH101J	J	100p 50V Ceramic	AA
C1016	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C1017	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C1018	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1019	VCCSPA1HL220J	J	22p 50V Ceramic	AA
C1020	VCCSPA1HL220J	J	22p 50V Ceramic	AA
C1021	VCCSPA1HL220J	J	22p 50V Ceramic	AA
C1022	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1025	VCQYTA1HM153J	J	0.015 50V Mylar	AA
C1026	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C1027	VCEAGA1HW225M	J	2.2 50V Electrolytic	AB
C1030	VCEAGA1HW475M	J	4.7 50V Electrolytic	AB
C1121	VCEAGA2AW107M	J	100 100V Electrolytic	AD
C1122	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C1123	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C1124	VCEAGA1EW108M	J	1000 25V Electrolytic	AD
C1125	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C1126	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C1127	VCKYPA2HB102K	J	1000p 500V Ceramic	AA
C1130	VCEAGA1HW475M	J	4.7 50V Electrolytic	AB

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## PWB-A DUNTK7960WEV2 MOTHER UNIT (Continued)

### CAPACITORS (Continued)

C1703	VCIFYHA1HA184J	J	0.18 50V M. Polyester	AC
C1704	VCCCPA1HH220J	J	22p 50V Ceramic	AA

### RESISTORS

R201	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
△ R202	VRG-RL2HB2R2J	J	2.2 1/2W Fuse Resistor	AB
R203	VRD-RM2HD562J	J	5.6k 1/2W Carbon	AA
R204	VRD-RM2HD562J	J	5.6k 1/2W Carbon	AA
R205	VRD-RM2HD682J	J	6.8k 1/2W Carbon	AA
R206	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R207	VRD-RA2BE564J	J	560k 1/8W Carbon	AA
R210	VRD-RA2BE104J	J	100k 1/8W Carbon	AA
R211	VRD-RA2BE823J	J	82k 1/8W Carbon	AA
R212	VRD-RA2EE105J	J	1M 1/4W Carbon	AA
R213	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R214	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R215	VRD-RA2BE154J	J	150k 1/8W Carbon	AA
R216	VRD-RA2BE393J	J	39k 1/8W Carbon	AA
R217	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R218	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R219	See Controls			
R220	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
R223	VRD-RA2BE221J	J	220 1/8W Carbon	AA
R226	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R227	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R228	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R229	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R233	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R234	See Controls			
R235	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R236	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
R237	VRD-RA2EE332J	J	3.3k 1/4W Carbon	AA
R238	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R239	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R240	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R243	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R301	VRD-RA2BE100J	J	10 1/8W Carbon	AA
R302	VRD-RA2BE100J	J	10 1/8W Carbon	AA
R303	VRD-RA2BE101J	J	100 1/8W Carbon	AA
△ R304	VRG-RL2HB2R2J	J	2.2 1/2W Fuse Resistor	AB
△ R305	VRG-RL2HB2R2J	J	2.2 1/2W Fuse Resistor	AB
R306	VRD-RA2BE183J	J	18k 1/8W Carbon	AA
R307	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R308	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R309	VRD-RA2BE183J	J	18k 1/8W Carbon	AA
R310	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R311	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R313	VRD-RA2BE824J	J	820k 1/8W Carbon	AA
R314	VRD-RA2BE153J	J	15k 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code
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### RESISTORS (Continued)

R315	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R316	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R317	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R318	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R319	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R320	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R321	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R322	VRD-RA2BE224J	J	220k 1/8W Carbon	AA
R323	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R324	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R325	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R326	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R327	VRD-RA2BE122J	J	1.2k 1/8W Carbon	AA
R328	VRD-RA2BE122J	J	1.2k 1/8W Carbon	AA
R329	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R330	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R331	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R332	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R333	See Controls			
R334	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R336	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R337	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R340	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R341	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R342	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R401	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
R403	See Controls			
R404	VRDRAN2BE123J	J	12k 1/8W Carbon	AA
R405	VRD-RA2BE182J	J	1.8k 1/8W Carbon	AA
R406	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R407	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R408	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R409	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R410	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R411	VRD-RA2BE391J	J	390 1/8W Carbon	AA
R412	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R413	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R414	VRD-RM2HD471J	J	470 1/2W Carbon	AA
R415	VRD-RA2EE224J	J	220k 1/4W Carbon	AA
R416	See Controls			
R417	VRD-RA2EE824J	J	820k 1/4W Carbon	AA
R418	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R419	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
R420	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R421	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R422	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R423	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R424	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R425	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
R426	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R427	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R428	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R429	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R430	VRD-RA2BE101J	J	100 1/8W Carbon	AA

Ref. No.	Part No.	*	Description	Code	Ref. No.	Part No.	*	Description	Code
<b>PWB-A DUNTK7960WEV2</b>					<b>RESISTORS (Continued)</b>				
<b>MOTHER UNIT (Continued)</b>									
<b>RESISTORS (Continued)</b>									
R431	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R486	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R432	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R490	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R433	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R491	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R434	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R492	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R435	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R493	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R437	VRD-RA2BE153J	J	15k 1/8W Carbon	AA	R498	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R438	VRD-RA2BE153J	J	15k 1/8W Carbon	AA	R501	VRD-VV3DB101J	J	100 2W Metal Oxide	AA
R439	VRD-RA2BE153J	J	15k 1/8W Carbon	AA	R502	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R442	VRD-RA2BE823J	J	82k 1/8W Carbon	AA	R503	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R443	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R504	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R444	VRD-RA2BE473J	J	47k 1/8W Carbon	AA	R505	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R445	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R506	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R446	VRD-RA2BE473J	J	47k 1/8W Carbon	AA	R507	VRD-RM2HD102J	J	1k 1/2W Carbon	AA
R447	VRD-RA2BE224J	J	220k 1/8W Carbon	AA	R508	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
△ R449	VRG-RL2HB220J	J	22 1/2W Fuse Resistor	AB	R509	VRD-RA2BE393J	J	39k 1/8W Carbon	AA
R450	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R510	<i>See Controls</i>			
R451	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R511	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
△ R452	VRG-RL2HB100J	J	10 1/2W Fuse Resistor	AB	R512	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R453	VRD-RA2BE821J	J	820 1/8W Carbon	AA	R513	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R454	VRD-RA2BE821J	J	820 1/8W Carbon	AA	R514	<i>See Controls</i>			
R455	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R515	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R456	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R516	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R457	VRD-RA2BE151J	J	150 1/8W Carbon	AA	R517	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R458	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R518	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
△ R459	VRG-RL2HB220J	J	22 1/2W Fuse Resistor	AB	R519	VRD-RM2HD391J	J	390 1/2W Carbon	AA
R460	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R520	VRD-RM2HD2R7J	J	2.7 1/2W Carbon	AA
R461	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R521	VRD-RM2HD2R7J	J	2.7 1/2W Carbon	AA
R462	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R522	VRD-RM2HD2R7J	J	2.7 1/2W Carbon	AA
R463	VRD-RA2BE750J	J	75 1/8W Carbon	AA	R523	VRD-VV3DB221J	J	220 2W Metal Oxide	AA
R464	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R524	VRD-VV3DB271J	J	270 2W Metal Oxide	AA
R465	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R525	VRD-VV3DB821J	J	820 2W Metal Oxide	AA
R466	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	△ R526	VRG-RL2HB470J	J	47 1/2W Fuse Resistor	AB
R467	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R527	VRD-RA2BE224J	J	220k 1/8W Carbon	AA
R468	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R528	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R469	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R529	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R470	VRD-RA2BE103J	J	10k 1/8W Carbon	AA	R530	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R471	VRD-RA2BE103J	J	10k 1/8W Carbon	AA	R531	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R472	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R550	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R473	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R601	VRD-RM2HD121J	J	120 1/2W Carbon	AA
R474	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R602	<i>See Controls</i>			
R475	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R603	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R476	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R604	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R477	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R605	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R478	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R606	VRD-RA2EE820J	J	82 1/4W Carbon	AA
R479	VRD-RA2BE223J	J	22k 1/8W Carbon	AA	R607	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R480	VRD-RA2BE563J	J	56k 1/8W Carbon	AA	R608	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R481	VRD-RA2BE563J	J	56k 1/8W Carbon	AA	R609	VRD-RU2EE471J	J	470 1/4W Carbon	AA
R482	VRD-RA2BE563J	J	56k 1/8W Carbon	AA	R610	VRD-RM2HD332J	J	3.3k 1/2W Carbon	AA
R483	VRD-RA2BE563J	J	56k 1/8W Carbon	AA	R611	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R484	VRD-RA2BE103J	J	10k 1/8W Carbon	AA	R612	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R485	VRD-RA2BE183J	J	18k 1/8W Carbon	AA	R613	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
					R614	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
					R615	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
					R616	VRD-RA2EE564J	J	560k 1/4W Carbon	AA

Ref. No.	Part No.	*	Description	Code
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**PWB-A DUNTK7960WEV2  
MOTHER UNIT (Continued)**

**RESISTORS (Continued)**

R617	VRD-RA2EE334J	J	330k 1/4W Carbon	AA
R618	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R620	VRD-RM2HD820J	J	82 1/2W Carbon	AA
R621	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R623	VRD-RA2BE100J	J	10 1/8W Carbon	AA
R625	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R626	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R801	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R802	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R803	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R804	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R805	VRD-RM2HD471J	J	470 1/2W Carbon	AA
R806	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R807	VRD-RM2HD471J	J	470 1/2W Carbon	AA
R808	VRD-RA2BE121J	J	120 1/8W Carbon	AA
R809	VRD-RM2HD471J	J	470 1/2W Carbon	AA
R811	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
R812	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
R813	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R814	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R815	VRD-RA2BE750J	J	75 1/8W Carbon	AA
R818	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R819	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R822	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R823	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R824	VRD-RA2BE122J	J	1.2k 1/8W Carbon	AA
R825	VRD-RA2BE560J	J	56 1/8W Carbon	AA
R1001	VRD-RM2HD101J	J	100 1/2W Carbon	AA
R1002	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1003	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1004	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1005	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R1006	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1008	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1009	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R1010	VRD-RM2HD820J	J	82 1/2W Carbon	AA
R1011	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1012	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R1013	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1014	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1015	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1016	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1017	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1018	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1019	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1020	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1021	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1022	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1023	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1024	VRD-RA2BE104J	J	100k 1/8W Carbon	AA
R1025	VRD-RA2BE563J	J	56k 1/8W Carbon	AA

Ref. No.	Part No.	*	Description	Code
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**RESISTORS (Continued)**

R1026	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1027	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1028	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1029	VRD-RA2BE224J	J	220k 1/8W Carbon	AA
R1030	VRD-RA2EE105J	J	1M 1/4W Carbon	AA
R1031	VRD-RA2BE274J	J	270k 1/8W Carbon	AA
R1032	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1033	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R1034	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1035	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1036	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1037	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1038	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1039	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R1040	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R1041	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1042	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R1043	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1044	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1045	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1046	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1047	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1048	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R1049	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R1050	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R1051	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R1052	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R1053	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1054	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1056	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1058	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1059	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1060	VRS-VV3DB153J	J	15k 2W Metal Oxide	AA
R1061	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R1062	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1063	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1064	VRD-RA2BE684J	J	680k 1/8W Carbon	AA
R1065	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R1066	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R1067	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1068	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1069	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1070	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1071	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1072	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R1073	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R1074	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R1075	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R1076	VRD-RA2BE183J	J	18k 1/8W Carbon	AA
R1077	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1078	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
R1079	VRD-RA2BE182J	J	1.8k 1/8W Carbon	AA
R1080	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
R1081	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA

Ref. No.	Part No.	*	Description	Code
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## PWB-A DUNTK7960WEV2 MOTHER UNIT (Continued)

### RESISTORS (Continued)

R1082	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1083	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1084	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R1085	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R1086	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1087	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1088	VRD-RA2BE393J	J	39k 1/8W Carbon	AA
R1089	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1090	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1091	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1093	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1094	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R1095	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R1096	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1097	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1098	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1121	VRS-VV3DB472J	J	4.7k 2W Metal Oxide	AA
R1122	VRS-VV3DB272J	J	2.7k 2W Metal Oxide	AA
R1123	VRD-RM2HD562J	J	5.6k 1/2W Carbon	AA
R1124	VRD-RM2HD151J	J	150 1/2W Carbon	AA
R1125	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1126	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1127	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R1128	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R1129	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1130	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1131	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1133	VRD-RM2HD181J	J	180 1/2W Carbon	AA
R1134	VRD-RA2BE224J	J	220k 1/8W Carbon	AA
R1135	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1136	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1137	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1138	VRD-RA2BE393J	J	39k 1/8W Carbon	AA
R1139	VRD-RA2BE564J	J	560k 1/8W Carbon	AA
R1150	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1151	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1152	VRD-RA2BE681J	J	680 1/8W Carbon	AA

### RELAY AND SWITCHES

RY701	RRLYZ0020CEN1	J	Power Relay	AN
S401	QSW-B0015CEZZ	J	Service Switch	AC
S501	QSW-B0018CEZZ	J	Vertical Center Adjust.	AD

Ref. No.	Part No.	*	Description	Code
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### MISCELLANEOUS PARTS

FB1001	RBLN-0036CEZZ	J	Ferrite Bead	AB
J401	QTANJ0632CEZZ	J	Jack, A/V	AH
J402	QSOCD0408CEZZ	J	Socket	AG
P302	QPLGN0413GEZZ	J	Plug 4-pin, (S)	AB
P303	QPLGN0213GEZZ	J	Plug 2-pin, (XS)	AB
P401	QPLGN0578GEZZ	J	Plug 5-pin, (KY)	AB
P402	QPLGN0278GEZZ	J	Plug 2-pin, (CC)	AA
P403	QPLGN0278GEZZ	J	Plug 2-pin, (CP)	AA
P404	QPLGN0278GEZZ	J	Plug 2-pin, (CS)	AA
P405	QPLGN0878GEZZ	J	Plug 8-pin, (SY)	AC
P406	QPLGN0378GEZZ	J	Plug 3-pin, (SV)	AB
P501	QPLGN0413GEZZ	J	Plug 4-pin, (VO)	AB
P502	QPLGN0278GEZZ	J	Plug 2-pin, (XV)	AA
P606	QPLGN0878GEZZ	J	Plug 8-pin, (W)	AC
P607	QPLGN0513GEZZ	J	Plug 5-pin, (XA)	AB
P704	QPLGN0304CEZZ	J	Plug 3-pin, (AB)	AB
P709	QPLGN0304CEZZ	J	Plug 3-pin, (A)	AB
P1001	QPLGN0478GEZZ	J	Plug 4-pin, (TA)	AB
P1002	QPLGN0278GEZZ	J	Plug 2-pin, (TB)	AA
P1003	QPLGN0313GEZZ	J	Plug 3-pin, (TC)	AB
P1004	QPLGN0213GEZZ	J	Plug 2-pin, (TD)	AB
P1005	QPLGN0678GEZZ	J	Plug 6-pin, (O)	AB
P1006	QPLGN0913GEZZ	J	Plug 9-pin, (RS)	AB

— End of PWB-A —



Ref. No.	Part No.	*	Description	Code	Ref. No.	Part No.	*	Description	Code
<b>PWB-A DUNTK7960WEV2</b>					<b>RESISTORS (Continued)</b>				
<b>MOTHER UNIT (Continued)</b>									
<b>RESISTORS (Continued)</b>									
R617	VRD-RA2EE334J	J	330k 1/4W Carbon	AA	R1026	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R618	VRD-RA2BE473J	J	47k 1/8W Carbon	AA	R1027	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R620	VRD-RM2HD820J	J	82 1/2W Carbon	AA	R1028	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R621	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1029	VRD-RA2BE224J	J	220k 1/8W Carbon	AA
R623	VRD-RA2BE100J	J	10 1/8W Carbon	AA	R1030	VRD-RA2EE105J	J	1M 1/4W Carbon	AA
R625	VRD-RA2BE153J	J	15k 1/8W Carbon	AA	R1031	VRD-RA2BE274J	J	270k 1/8W Carbon	AA
R626	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA	R1032	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R801	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA	R1033	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R802	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA	R1034	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R803	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA	R1035	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R804	VRD-RA2BE121J	J	120 1/8W Carbon	AA	R1036	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R805	VRD-RM2HD471J	J	470 1/2W Carbon	AA	R1037	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R806	VRD-RA2BE121J	J	120 1/8W Carbon	AA	R1038	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R807	VRD-RM2HD471J	J	470 1/2W Carbon	AA	R1039	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R808	VRD-RA2BE121J	J	120 1/8W Carbon	AA	R1040	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R809	VRD-RM2HD471J	J	470 1/2W Carbon	AA	R1041	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R811	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA	R1042	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R812	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA	R1043	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R813	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA	R1044	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R814	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1045	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R815	VRD-RA2BE750J	J	75 1/8W Carbon	AA	R1046	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R818	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R1047	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R819	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R1048	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R822	VRD-RA2BE273J	J	27k 1/8W Carbon	AA	R1049	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R823	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA	R1050	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R824	VRD-RA2BE122J	J	1.2k 1/8W Carbon	AA	R1051	VRD-RA2BE273J	J	27k 1/8W Carbon	AA
R825	VRD-RA2BE560J	J	56 1/8W Carbon	AA	R1052	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R1001	VRD-RM2HD101J	J	100 1/2W Carbon	AA	R1053	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1002	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R1054	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1003	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA	R1056	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1004	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R1058	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1005	VRD-RA2BE153J	J	15k 1/8W Carbon	AA	R1059	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1006	VRD-RA2BE473J	J	47k 1/8W Carbon	AA	R1060	VRS-VV3DB153J	J	15k 2W Metal Oxide	AA
R1008	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1061	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R1009	VRD-RA2BE683J	J	68k 1/8W Carbon	AA	R1062	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1010	VRD-RM2HD820J	J	82 1/2W Carbon	AA	R1063	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1011	VRD-RA2BE102J	J	1k 1/8W Carbon	AA	R1064	VRD-RA2BE684J	J	680k 1/8W Carbon	AA
R1012	VRD-RA2BE683J	J	68k 1/8W Carbon	AA	R1065	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R1013	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1066	VRD-RA2BE123J	J	12k 1/8W Carbon	AA
R1014	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1067	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1015	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1068	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1016	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1069	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1017	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1070	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1018	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1071	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1019	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1072	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R1020	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1073	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R1021	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1074	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R1022	VRD-RA2BE101J	J	100 1/8W Carbon	AA	R1075	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R1023	VRD-RA2BE473J	J	47k 1/8W Carbon	AA	R1076	VRD-RA2BE183J	J	18k 1/8W Carbon	AA
R1024	VRD-RA2BE104J	J	100k 1/8W Carbon	AA	R1077	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1025	VRD-RA2BE563J	J	56k 1/8W Carbon	AA	R1078	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
					R1079	VRD-RA2BE182J	J	1.8k 1/8W Carbon	AA
					R1080	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
					R1081	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code
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## PWB-A DUNTK7960WEV2 MOTHER UNIT (Continued)

### RESISTORS (Continued)

R1082	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1083	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1084	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R1085	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R1086	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1087	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1088	VRD-RA2BE393J	J	39k 1/8W Carbon	AA
R1089	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1090	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1091	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1093	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1094	VRD-RA2BE392J	J	3.9k 1/8W Carbon	AA
R1095	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R1096	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1097	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1098	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1121	VRS-VV3DB472J	J	4.7k 2W Metal Oxide	AA
R1122	VRS-VV3DB272J	J	2.7k 2W Metal Oxide	AA
R1123	VRD-RM2HD562J	J	5.6k 1/2W Carbon	AA
R1124	VRD-RM2HD151J	J	150 1/2W Carbon	AA
R1125	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1126	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R1127	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R1128	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R1129	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1130	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1131	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1133	VRD-RM2HD181J	J	180 1/2W Carbon	AA
R1134	VRD-RA2BE224J	J	220k 1/8W Carbon	AA
R1135	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1136	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1137	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1138	VRD-RA2BE393J	J	39k 1/8W Carbon	AA
R1139	VRD-RA2BE564J	J	560k 1/8W Carbon	AA
R1150	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1151	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1152	VRD-RA2BE681J	J	680 1/8W Carbon	AA

### RELAY AND SWITCHES

△ RY701	RRLYZ0020CEN1	J	Power Relay	AN
S401	QSW-B0015CEZZ	J	Service Switch	AC
S501	QSW-B0018CEZZ	J	Vertical Center Adjust.	AD

Ref. No.	Part No.	★	Description	Code
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### MISCELLANEOUS PARTS

FB1001	RBLN-0036CEZZ	J	Ferrite Bead	AB
△ J401	QTANJ0632CEZZ	J	Jack, A/V	AH
△ J402	QSOCD0408CEZZ	J	Socket	AG
P302	QPLGN0413GEZZ	J	Plug 4-pin, (S)	AB
P303	QPLGN0213GEZZ	J	Plug 2-pin, (XS)	AB
P401	QPLGN0578GEZZ	J	Plug 5-pin, (KY)	AB
P402	QPLGN0278GEZZ	J	Plug 2-pin, (CC)	AA
P403	QPLGN0278GEZZ	J	Plug 2-pin, (CP)	AA
P404	QPLGN0278GEZZ	J	Plug 2-pin, (CS)	AA
P405	QPLGN0878GEZZ	J	Plug 8-pin, (SY)	AC
P406	QPLGN0378GEZZ	J	Plug 3-pin, (SV)	AB
P501	QPLGN0413GEZZ	J	Plug 4-pin, (VO)	AB
P502	QPLGN0278GEZZ	J	Plug 2-pin, (XV)	AA
P606	QPLGN0878GEZZ	J	Plug 8-pin, (W)	AC
P607	QPLGN0513GEZZ	J	Plug 5-pin, (XA)	AB
△ P704	QPLGN0304CEZZ	J	Plug 3-pin, (AB)	AB
△ P709	QPLGN0304CEZZ	J	Plug 3-pin, (A)	AB
P1001	QPLGN0478GEZZ	J	Plug 4-pin, (TA)	AB
P1002	QPLGN0278GEZZ	J	Plug 2-pin, (TB)	AA
P1003	QPLGN0313GEZZ	J	Plug 3-pin, (TC)	AB
P1004	QPLGN0213GEZZ	J	Plug 2-pin, (TD)	AB
P1005	QPLGN0678GEZZ	J	Plug 6-pin, (O)	AB
P1006	QPLGN0913GEZZ	J	Plug 9-pin, (RS)	AB

— End of PWB-A —

Ref. No.	Part No.	*	Description	Code
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## PWB-B DUNTK7959WEV1 DEFLECTION / POWER UNIT

### INTEGRATED CIRCUITS

IC601	VHILM358P/-1 J		LM358P	AC
△IC701	VHISTR56309-1 J			AU
△IC702	RH-FX0012CEZZ J			AF
△IC703	VHISE120N/-1 J		SE120N	AG
IC2603	VHITA7812S/-1 J		TA7812S	AD

### TRANSISTORS

△Q605	VS2SD1554//1E J		2SD1554	AL
△Q615	VS2SA1015Y/1E J		2SA1015(Y)	AC
△Q701	VS2SC945AP/-1 J		2SC945AP	AB
△Q2601	VS2SD1555//1E J		2SD1555	AP
Q2602	VS2SC3328Y/1E J		2SC3328(Y)	AD
Q2603	VS2SC945AP/-1 J		2SC945AP	AB

### DIODES

D609	RH-DX0130CEZZ J			AE
D615	VHD1SS119//1E J		1SS119	AA
D616	VHD1SS119//1E J		1SS119	AA
D617	VHD1SS119//1E J		1SS119	AA
D619	VHD1SS119//1E J		1SS119	AA
D620	VHD1SS119//1E J		1SS119	AA
D621	RH-EX0051CEZZ J		Zener Diode	AB
△D701	RH-DX0336CEZZ J			AH
△D707	RH-DX0202CEZZ J			AD
△D708	VHD1SS119//1E J		1SS119	AA
△D710	RH-DX0164CEZZ J			AC
D711	RH-DX0382CEZZ J			AD
D712	RH-DX0243CEZZ J			AF
D714	RH-DX0243CEZZ J			AF
△D715	RH-EX0152CEZZ J		Zener Diode	AE
△D730	RH-DX0027CEZZ J			AE
D2603	RH-DX0062CEZZ J			AD
D2604	RH-DX0073CEZZ J			AD
D2605	RH-DX0127CEZZ J			AC
D2606	RH-DX0130CEZZ J			AE
△VA701	RH-VX0022CEZZ J		Varistor	AD

### THERMISTORS

TH601	RH-HZ0006CEZZ J		Thermistor	AB
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### PACKAGED CIRCUIT

△PR701	RMPTP0062CEZZ J		Positive Coefficient Thermistor	AH
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Ref. No.	Part No.	*	Description	Code
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### COILS AND TRANSFORMERS

L601	VP-CF390K0000 J		Coil, 39μH	AB
L602	RCiLZ0797CEZZ J		Coil	AK
L605	RCiLP0087CEZZ J		Peaking Coil	AE
L606	RCiLZ0593CEZZ J		Coil, Horizontal Size	AH
L711	RCiLP0106CEZZ J		Peaking Coil	AE
L712	RCiLP0106CEZZ J		Peaking Coil	AE
L713	RCiLP0106CEZZ J		Peaking Coil	AE
△L2701	RCiLF0154CEZZ J		Coil, Line Filter	AQ
△L2703	RCiLF0154CEZZ J		Coil, Line Filter	AQ
△T601	RTRNZ0343CEN1 J		Horiz. Drive Trans.	AG
△T602	RTRNF1892CEZZ J		Flyback Trans. (F.B.T.)	BE
△T2701	RTRNZ0505CEZZ J		Regulator Trans.	BA

### CAPACITORS

C602	VCKYPA2HB472K J		4700p500V Ceramic	AB
C605	VCKYPA1HB102K J		1000p50V Ceramic	AA
C608	VCFPPC2DB224J J		0.22 200V M. Polyester	AE
△C609	VCFPPD3CA562H J		5600p1.6kV M. Polyester	AE
△C610	VCFPPD3CA472H J		4700p1.6kV M. Polyester	AD
C614	VCFYHA1HA104J J		0.1 50V M. Polyester	AB
C615	VCFPPD2DB474J J		0.47 200V M. Polyester	AE
C616	VCFPPC3CA152H J		1500p1.6kV M. Polyester	AD
C617	VCFPPD3CA222H J		2200p1.6kV M. Polyester	AE
C618	VCKYPA2HB102K J		1000p500V Ceramic	AA
C619	VCEAGA2EW336M J		33 250V Electrolytic	AD
C620	VCKYPA2HB102K J		1000p500V Ceramic	AA
C621	VCEAGA1VW108M J		1000 35V Electrolytic	AD
C622	VCFYHA1HA104J J		0.1 50V M. Polyester	AB
C624	VCEAGA1EW107M J		100 25V Electrolytic	AD
C637	VCEAGA1HW104M J		0.1 50V Electrolytic	AA
C653	RC-EZ0322CEZZ J		1000 250V Electrolytic	AE
C657	RC-KZ0029CEZZ J		0.01 AC250V Ceramic	AC
C658	VCFYSB2EB224K J		0.22 250V M. Polyester	AD
C659	VCEAGA1HW106M J		10 50V Electrolytic	AC
C661	VCEAGA0JW337M J		330 6.3V Electrolytic	AB
C662	VCEAGA1EW477M J		470 25V Electrolytic	AD
C663	VCEAGA1CW337M J		330 16V Electrolytic	AC
△C703	RC-EZ0358CEZZ J		680 400V Electrolytic	AX
△C704	RC-KZ0029CEZZ J		0.01 AC250V Ceramic	AC
△C705	RC-KZ0029CEZZ J		0.01 AC250V Ceramic	AC
△C706	VCEAGA1HW227M J		220 50V Electrolytic	AC
△C707	VCQYTA1HM222J J		2200p50V Mylar	AA
△C708	RC-KZ0024CEZZ J		1000p2kV Ceramic	AC
△C710	VCSATA1VE106K J		10 35V Tantalum	AE
△C711	VCKYPA2HB102K J		1000p500V Ceramic	AA
△C712	VCEAGA1EW107M J		100 25V Electrolytic	AD
△C713	VCQPSC2JA333K J		0.033 630V Mylar	AB
△C714	VCKYPH3DB561K J		560p 2000V Ceramic	AC
△C717	VCFYHA1HA563J J		0.056 50V M. Polyester	AB
△C719	VCFYHA1HA104J J		0.1 50V M. Polyester	AB
△C721	RC-KZ0025CEZZ J		6800p2kV Ceramic	AC

Ref. No.	Part No.	*	Description	Code
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# **PWB-B DUNTK7959WEV1** **DEFLECTION / POWER UNIT (Continued)**

## CAPACITORS (Continued)

C722	RC-KZ0024CEZZ	J	1000p2kV Ceramic	AC
C723	VCKYPA2HB102K	J	1000p500V Ceramic	AA
C725	VCKYPA2HB102K	J	1000p500V Ceramic	AA
C726	RC-EZ0070CEZZ	J	330 160V Electrolytic	AH
C727	RC-EZ0322CEZZ	J	1000 250V Electrolytic	AE
C728	RC-EZ0322CEZZ	J	1000 250V Electrolytic	AE
C730	RC-EZ0069CEZZ	J	220 160V Electrolytic	AG
C731	RC-EZ0322CEZZ	J	1000 250V Electrolytic	AE
C732	RC-EZ0322CEZZ	J	1000 250V Electrolytic	AE
C733	RC-KZ0029CEZZ	J	0.01 AC250V Ceramic	AC
△ C735	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
△ C737	RC-KZ0025CEZZ	J	6800p2kV Ceramic	AC
C2601	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C2603	VCKYPA2HB221K	J	220p 500V Ceramic	AA
C2604	VCEAGA1EW227M	J	220 25V Electrolytic	AC
C2607	VCFPPC2DB274J	J	0.27 200V M. Polyester	AE
△ C2701	RC-FZ0010GEZZ	J	0.1 250V M. Polyester	AE
△ C2702	VCFYSB2EB224K	J	0.22 250V M. Polyester	AD

## RESISTORS

R619	VRD-RM2HD331J	J	330 1/2W Carbon	AA
R622	VRD-RA2BE104J	J	100k1/8W Carbon	AA
R624	VRD-RA2EE125J	J	1.2M1/4W Carbon	AA
R627	VRD-RA2BE564J	J	560k1/8W Carbon	AA
R628	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
△ R631	VRG-RF2EB470J	J	47 1/4W Carbon	AB
R668	VRD-RM2HD102J	J	1k 1/2W Carbon	AA
R669	VRD-RM2HD152J	J	1.5k 1/2W Carbon	AA
R670	VRD-RM2HD152J	J	1.5k 1/2W Carbon	AA
R671	VRS-SU2HB102J	J	1k 1/2W Metal Oxide	AA
R672	VRD-RA2EE393J	J	39k 1/4W Carbon	AA
R673	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R674	VRD-RM2HD102J	J	1k 1/2W Carbon	AA
R675	VRD-RA2EE103J	J	10k 1/4W Carbon	AA
R676	VRD-RA2EE101J	J	100 1/4W Carbon	AA
R677	VRN-VV3LB1R8J	J	1.8 3W Metal Film	AC
R678	VRS-VV3LB222J	J	2.2k 3W Metal Oxide	AB
R686	VRD-RA2EE101J	J	100 1/4W Carbon	AA
△ R691	VRN-VV3DB1R0J	J	1 2W Metal Film	AB
△ R692	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
△ R693	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA
R694	VRS-VV3DB220J	J	22 2W Metal Oxide	AA
△ R701	RR-WZ0139CEZZ	J	2.2 15W Cement	AE
△ R702	RR-WZ0139CEZZ	J	2.2 15W Cement	AE
△ R703	VRD-RM2HD391J	J	390 1/2W Carbon	AA
△ R705	VRD-RM2HD564J	J	560k1/2W Carbon	AA
△ R710	RR-WZ0140CEZZ	J	0.22 3W Cement	AC
△ R711	VRW-KX3HC180K	J	18 5W Cement	AC
△ R713	VRD-RM2HD154J	J	150k1/2W Carbon	AA

Ref. No.	Part No.	*	Description	Code
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## RESISTORS (Continued)

△ R714	VRD-RM2HD154J	J	150k1/2W Carbon	AA
△ R717	VRS-SV3LB333J	J	33k 3W Metal Oxide	AC
△ R718	VRS-SV3LB390J	J	39 3W Metal Oxide	AC
△ R722	VRD-RM2HD821J	J	820 1/2W Carbon	AA
△ R724	VRC-UA2HG825K	J	8.2M1/2W Solid	AA
△ R725	VRC-UA2HG825K	J	8.2M1/2W Solid	AA
R726	VRD-RM2HD223J	J	22k 1/2W Carbon	AA
R727	VRN-VV3DB1R2J	J	1.2 2W Metal Film	AA
△ R728	RR-DZ0013CEZZ	J	3.3M Special	AD
△ R729	VRD-RM2HD471J	J	470 1/2W Carbon	AA
△ R730	VRD-RM2HD564J	J	560k1/2W Carbon	AA
△ R731	VRD-RM2HD470J	J	47 1/2W Carbon	AA
△ R733	VRG-RF2EB1R0J	J	1 1/4W Fuse Resistor	AB
△ R735	VRD-RM2HD121J	J	120 1/2W Carbon	AA
R736	VRN-KT3LB1R5J	J	1.5 3W Metal Film	AC
R740	VRN-VV3DB1R2J	J	1.2 2W Metal Film	AA
R2601	VRD-RM2HD470J	J	47 1/2W Carbon	AA
R2602	VRD-RM2HD820J	J	82 1/2W Carbon	AA
R2603	VRW-KX3HC470K	J	47 5W Cement	AC
R2604	VRD-RA2EE221J	J	220 1/4W Carbon	AA
R2605	VRD-RA2EE471J	J	470 1/4W Carbon	AA
R2606	VRD-RA2EE102J	J	1k 1/4W Carbon	AA
R2607	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R2608	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
△ R2612	VRG-RF2HB220J	J	22 1/2W Fuse Resistor	AB
R2613	VRS-VV3DB680J	J	68 2W Metal Oxide	AA
R2614	RR-WZ0141CEZZ	J	3.3 15W Cement	AE
R2615	VRS-VV3DB470J	J	47 2W Metal Oxide	AA
△ R2616	VRG-RF2HB1R0J	J	1 1/2W Fuse Resistor	AA
△ R2617	VRG-RF2HB3R3J	J	3.3 1/2W Fuse Resistor	AB
R2618	VRD-RA2EE471J	J	470 1/4W Carbon	AA
R2619	VRS-VV3DB561J	J	560 2W Metal Oxide	AA
R2620	VRD-RA2EE560J	J	56 1/4W Carbon	AA
R2621	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R2623	VRD-RA2EE564J	J	560k1/4W Carbon	AA
R2625	VRD-RA2EE564J	J	560k1/4W Carbon	AA
R2626	VRD-RA2BE272J	J	2.7k 1/8W Carbon	AA

## MISCELLANEOUS PARTS

△ F701	QFS-C5022CEZZ	J	Fuse, T5A	AD
	QFSHD1002CEZZ	J	Fuse Holder	AA
FB601	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB602	RBLN-0010CEZZ	J	Ferrite Bead	AC
FB603	RBLN-0037CEZZ	J	Ferrite Bead	AB
△ FB701	RBLN-0010CEZZ	J	Ferrite Bead	AC
△ FB702	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB704	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB705	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB707	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB708	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB709	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB711	RBLN-0037CEZZ	J	Ferrite Bead	AB

Ref. No.	Part No.	★	Description	Code
<b>PWB-B DUNTK7959WEV1</b>				
<b>DEFLECTION / POWER UNIT (Continued)</b>				

**MISCELLANEOUS PARTS (Continued)**

△ FB712	RBLN-0037CEZZ	J	Ferrite Bead	AB
P601	QPLGN0878GEZZ	J	Plug 8-pin, (W)	AC
P602	QPLGN0278GEZZ	J	Plug 2-pin, (XV)	AA
P603	QPLGN0413GEZZ	J	Plug 4-pin, (VO)	AB
P604	QPLGN0505CEZZ	J	Plug 5-pin, (K)	AB
P605	QPLGN0313GEZZ	J	Plug 3-pin, (H)	AB
P702	QPLGN0213GEZZ	J	Plug 2-pin, (XS)	AB
P703	QPLGN0513GEZZ	J	Plug 5-pin, (XA)	AB
△ P705	QPLGN0304CEZZ	J	Plug 3-pin, (AD)	AB
△ P707	QPLGN0304CEZZ	J	Plug 3-pin, (AC)	AB
△ P708	QPLGN0207CEZZ	J	Plug 2-pin, (G)	AA
△ P710	QPLGN0304CEZZ	J	Plug 3-pin, (AB)	AB

— End of PWB-B —

Ref. No.	Part No.	★	Description	Code
<b>PWB-C DUNTK7958WEV1</b>				
<b>CRT Socket Unit</b>				

**TRANSISTORS**

△ Q2801	VS2SC4544LB1E	J	2SC4544LB	AD
△ Q2802	VS2SC4544LB1E	J	2SC4544LB	AD
△ Q2803	VS2SC4544LB1E	J	2SC4544LB	AD

**COILS**

L2801	VP-2K470K000K	J	47 $\mu$ H	AB
L2802	VP-2K470K000K	J	47 $\mu$ H	AB
L2803	VP-2K470K000K	J	47 $\mu$ H	AB

**CONTROLS**

R2811	RVR-B4563CEZZ	J	500(B) Green Drive	AD
R2812	RVR-B4563CEZZ	J	500(B) Blue Drive	AD
R2816	RVR-B5015CEZZ	J	1k(B) Red Bias	AC
R2817	RVR-B5015CEZZ	J	1k(B) Green Bias	AC
R2818	RVR-B5015CEZZ	J	1k(B) Blue Bias	AC

**CAPACITORS**

C2801	VCKYAT1HB391K	J	390p 50V Ceramic	AA
C2802	VCKYPA1HB391K	J	390p 50V Ceramic	AA
C2803	VCKYPA1HB391K	J	390p 50V Ceramic	AA
C2804	VCKYAT1HB331K	J	330p 50V Ceramic	AA
C2805	VCKYAT1HB221K	J	220p 50V Ceramic	AA
C2806	VCKYAT1HB221K	J	220p 50V Ceramic	AA
C2807	VCEAGA2EW106M	J	10 250V Electrolytic	AC
C2809	RC-KZ0029CEZZ	J	0.01 2kV Ceramic	AC
C2810	VCKYPA1HB561K	J	560p 50V Ceramic	AA

**RESISTORS**

R2801	VRD-RA2BE470J	J	47 1/8W Carbon	AA
R2802	VRD-RA2BE470J	J	47 1/8W Carbon	AA
R2803	VRD-RA2BE470J	J	47 1/8W Carbon	AA
R2804	VRD-RA2BE470J	J	47 1/8W Carbon	AA
R2805	VRD-RA2BE470J	J	47 1/8W Carbon	AA
R2806	VRD-RA2BE470J	J	47 1/8W Carbon	AA
R2807	VRD-RA2BE151J	J	150 1/8W Carbon	AA
R2808	VRD-RA2BE151J	J	150 1/8W Carbon	AA
R2809	VRD-RA2BE151J	J	150 1/8W Carbon	AA
R2810	VRD-RA2BE151J	J	150 1/8W Carbon	AA
R2811	See Controls			
R2812	See Controls			
R2813	VRD-RA2BE391J	J	390 1/8W Carbon	AA
R2814	VRD-RA2BE391J	J	390 1/8W Carbon	AA
R2815	VRD-RA2BE391J	J	390 1/8W Carbon	AA
R2816	See Controls			
R2817	See Controls			
R2818	See Controls			
R2819	VRS-VV3DB183J	J	18k 2W Metal Oxide	AA
R2820	VRS-VV3DB183J	J	18k 2W Metal Oxide	AA
R2821	VRS-VV3DB183J	J	18k 2W Metal Oxide	AA
R2822	VRC-MA2HG224K	J	220k 1/2W Solid	AA
R2823	VRC-MA2HG102K	J	1k 1/2W Solid	AA
R2824	VRC-MA2HG102K	J	1k 1/2W Solid	AA
R2825	VRC-MA2HG102K	J	1k 1/2W Solid	AA
R2826	VRS-VV3DB183J	J	18k 2W Metal Oxide	AA
R2827	VRS-VV3DB183J	J	18k 2W Metal Oxide	AA
R2828	VRS-VV3DB183J	J	18k 2W Metal Oxide	AA

**MISCELLANEOUS PARTS**

P2801	QPLGN0578GEZZ	J	Plug 5-pin, (KY)	AB
P2802	QPLGN0313GEZZ	J	Plug 3-pin, (H)	AB
△ SC2801	QSOCV0919CEZZ	J	CRT Socket	AH

— End of PWB-C —

Ref. No.	Part No.	*	Description	Code
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## PWB-D DUNTK7957WEV1 LED UNIT

### DIODES

D1701	RH-PX0291CEZZ	J	LED, Power Ind.	AC
D1703	RH-PX0274CEZZ	J	LED, Surround Ind.	AC
D1704	RH-PX0274CEZZ	J	LED, S-Video Ind.	AC

### CAPACITORS

C1701	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C1702	VCEAGA0JW107M	J	100 6.3V Electrolytic	AB

### RESISTORS

R1701	VRD-RA2EE101J	J	100 1/4W Carbon	AA
R1702	VRD-RA2EE101J	J	100 1/4W Carbon	AA
R1703	VRD-RA2EE272J	J	2.7k 1/4W Carbon	AA
R1704	VRD-RA2EE272J	J	2.7k 1/4W Carbon	AA
R1705	VRD-RM2HD821J	J	820 1/2W Carbon	AA
R1706	VRD-RA2EE272J	J	2.7k 1/4W Carbon	AA

### SWITCH

△ S1701	QSW-P0566CEZZ	J	Main's Power Switch	AL
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### MISCELLANEOUS PARTS

△ P1711	QPLGN0404CEZZ	J	Plug 4-pin, (AA)	AB
P1712	QPLGN0978GEZZ	J	Plug 9-pin, (O)	AC
	RRMCU0195CEZZ	J	Remote Control Receiver	AK

— End of PWB-D —

Ref. No.	Part No.	*	Description	Code
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## PWB-E DUNTK7956WEV1 CONTROL UNIT

### TRANSISTOR

Q2301	VS2SC945AP/-1	J	2SC945AP	AB
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### DIODES

D2301	VHD1SS119//1E	J	1SS119	AA
D2302	VHD1SS119//1E	J	1SS119	AA
D2303	RH-EX0153GEZZ	J	Zener Diode, 9.1V	AB

### CAPACITORS

C2301	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C2302	VCEAGA1CW106M	J	10 16V Electrolytic	AA

### RESISTORS

R2301	VRD-RA2HD102J	J	1k 1/2W Carbon	AA
R2302	VRD-RA2BE470J	J	47 1/8W Carbon	AA

### SWITCHES

△ S1711	QSW-K0095CEZZ	J	Stand-By	AB
△ S1712	QSW-K0095CEZZ	J	Channel Up	AB
△ S1713	QSW-K0095CEZZ	J	Channel Down	AB
△ S1714	QSW-K0095CEZZ	J	Vol-Up	AB
△ S1715	QSW-K0095CEZZ	J	Vol-Down	AB
△ S1716	QSW-K0095CEZZ	J	P-Mode	AB
△ S1717	QSW-K0095CEZZ	J	P-Up	AB
△ S1718	QSW-K0095CEZZ	J	P-Down	AB
△ S1721	QSW-K0105CEZZ	J	Fine-Up, Fine-Down, Skip, System, P-Tone, Blue-Back, Surround, Auto-Up, Auto-Down, Preset	AP

### MISCELLANEOUS PARTS

P1710	QPLGN0478GEZZ	J	Plug 4-pin, (SS)	AB
P1713	QPLGN0913GEZZ	J	Plug 9-pin, (T)	AB
P1714	QPLGN0913GEZZ	J	Plug 9-pin, (RS)	AB
P1715	QPLGN0278GEZZ	J	Plug 2-pin, (TB)	AA

— End of PWB-E —

Ref. No.	Part No.	*	Description	Code
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## PWM-A DUNTK7963WEV1 IF UNIT

### INTEGRATED CIRCUITS

IC2001	VHiLA7555/-1 J	LA7555	AM
IC2002	VHiTA8710S/-1 J	TA8710S	AL

### TRANSISTORS

Q2001	VS2SC1906//1E J	2SC1906	AC
Q2002	VS2SC945AP/-1 J	2SC945AP	AB
Q2003	VS2SC945AP/-1 J	2SC945AP	AB
Q2004	VS2SC945AP/-1 J	2SC945AP	AB
Q2005	VS2SC945AP/-1 J	2SC945AP	AB
Q2006	VS2SC945AP/-1 J	2SC945AP	AB
Q2007	VS2SC3399//1E J	2SC3399	AB
Q2008	VS2SC945AP/-1 J	2SC945AP	AB
Q2010	VS2SC3399//1E J	2SC3399	AB

### DIODES

D2001	VHD1SS119//1E J	1SS119	AA
D2002	VHD1SS119//1E J	1SS119	AA
D2003	VHD1SS119//1E J	1SS119	AA
D2004	VHD1SS119//1E J	1SS119	AA
D2005	RH-EX0440CEZZ J	Zener Diode	AA
D2006	VHD1SS119//1E J	1SS119	AA
D2007	VHD1SS119//1E J	1SS119	AA

### COILS AND TRANSFORMERS

CF2001	RFILC0205CEZZ J	Ceramic Filter 6.0 MHz Discriminator	AD
CF2002	RFILC0078GEZZ J	Ceramic Filter 4.5 MHz Discriminator	AD
CF2003	RFILC0143CEZZ J	Ceramic Filter 5.5 MHz Filter	AD
CF2004	RFILC0144CEZZ J	Ceramic Filter 6.0 MHz Filter	AD
CF2005	RFILC0145CEZZ J	Ceramic Filter 6.5 MHz Filter	AE
CF2006	RFILC0174CEZZ J	Ceramic Filter, 4.5 MHz Filter	AD
CF2007	RFILA0050CEZZ J	Ceramic Filter, 500kHz Oscillator	AC
CF2008	RFILC0084CEZZ J	Ceramic Filter, 6.0 MHz	AF
L2001	VP-XF1R0K0000 J	Coil, 1 $\mu$ H	AB
L2004	VP-XF220K0000 J	Coil, 22 $\mu$ H	AB
L2005	VP-XF100K0000 J	Coil, 10 $\mu$ H	AB
SF2001	RFILC0232CEZZ J	Surface Acoustic Wave Filter	AN
T2001	RCiLi0543CEZZ J	S.A.W. Matching Coil	AD
T2002	RCiLD0199CEZZ J	AFT Coil	AD
T2003	RCiLD0096CEZZ J	V.C.O. Coil	AE

Ref. No.	Part No.	*	Description	Code
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### CAPACITORS

C2001	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2002	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2003	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2004	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2005	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2006	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2007	VCEAGA1CW107M J	100 16V Electrolytic	AB
C2008	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2009	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2010	VCEAGA1HW474M J	0.47 50V Electrolytic	AA
C2011	VCFYHA1HA683J J	0.068 50V M. Polyester	AB
C2012	VCCCPA1HH9R0D J	9p 50V Ceramic	AA
C2013	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2014	VCEAGA1CW107M J	100 16V Electrolytic	AB
C2015	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2016	VCEAGA1HW474M J	0.47 50V Electrolytic	AA
C2017	VCEAGA1CW476M J	47 16V Electrolytic	AB
C2018	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2019	VCKYD41CY103N J	0.01 16V Ceramic	AA
C2020	VCQYTA1HM103J J	0.01 50V Mylar	AA
C2021	VCQYTA1HM123J J	0.012 50V Mylar	AA
C2022	VCE9GA1CW106M J	10 16V Elect.(N.P)	AB
C2023	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2024	VCEAGA1CW106M J	10 16V Electrolytic	AA
C2025	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2026	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2027	VCEAGA1CW107M J	100 16V Electrolytic	AB
C2028	VCKYPA1HB471K J	470p 50V Ceramic	AA
C2029	VCKYPA1HB471K J	470p 50V Ceramic	AA
C2030	VCKYPA1HF103Z J	0.01 50V Ceramic	AA
C2031	VCCCPA1HH680J J	68p 50V Ceramic	AA
C2032	VCKYD41CY103N J	0.01 16V Ceramic	AA
C2033	VCEAGA1CW107M J	100 16V Electrolytic	AB
C2034	VCKYD41CY103N J	0.01 16V Ceramic	AA

### RESISTORS

R2001	VRD-RA2BE562J J	5.6k 1/8W Carbon	AA
R2002	VRD-RA2BE152J J	1.5k 1/8W Carbon	AA
R2003	VRD-RA2BE680J J	68 1/8W Carbon	AA
R2004	VRD-RA2BE332J J	3.3k 1/8W Carbon	AA
R2005	VRD-RM2HD221J J	220 1/2W Carbon	AA
R2006	VRD-RA2EE561J J	560 1/4W Carbon	AA
R2007	VRD-RA2BE223J J	22k 1/8W Carbon	AA
R2008	VRD-RA2BE223J J	22k 1/8W Carbon	AA
R2009	VRD-RA2EE561J J	560 1/4W Carbon	AA
R2010	VRD-RA2BE223J J	22k 1/8W Carbon	AA
R2011	VRD-RA2BE223J J	22k 1/8W Carbon	AA
R2012	VRD-RA2BE223J J	22k 1/8W Carbon	AA
R2013	VRD-RA2BE223J J	22k 1/8W Carbon	AA
R2014	VRD-RA2BE122J J	1.2k 1/8W Carbon	AA
R2015	VRD-RA2BE103J J	10k 1/8W Carbon	AA
R2016	VRD-RA2BE824J J	820k 1/8W Carbon	AA

Ref. No. Part No. ★ Description Code

**PWM-A DUNTK7963WEV1**  
**IF UNIT (Continued)**

**RESISTORS (Continued)**

R2017	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R2018	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R2019	VRD-RA2BE151J	J	150 1/8W Carbon	AA
R2020	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R2021	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R2022	VRD-RM2HD471J	J	470 1/2W Carbon	AA
△ R2023	VRG-RF2EB220J	J	22 1/4W Fuse Resistor	AB
R2024	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R2025	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R2026	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R2027	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R2028	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R2029	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R2030	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R2031	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R2032	VRD-RA2BE183J	J	18k 1/8W Carbon	AA
R2033	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R2034	VRD-RA2BE683J	J	68k 1/8W Carbon	AA
R2036	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R2038	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R2039	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R2040	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R2041	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R2042	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R2043	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R2044	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R2045	VRD-RA2EE105J	J	1M 1/4W Carbon	AA
R2046	VRD-RA2BE472J	J	4.7k 1/8W Carbon	AA
R2047	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R2048	VRD-RA2BE821J	J	820 1/8W Carbon	AA
R2049	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R2050	VRD-RA2BE103J	J	10k 1/8W Carbon	AA

**MISCELLANEOUS PARTS**

P2001	QPLGZ0707GEZZ	J	Plug 7-pin, (IF)	AB
P2002	QPLGZ0607GEZZ	J	Plug 6-pin, (SH)	AC

— End of PWM-A —

Ref. No. Part No. ★ Description Code

**PWM-B DUNTK7961WEV1**  
**AV UNIT**

**INTEGRATED CIRCUIT**

IC1401	VHITA8742// -1	J	TA8742	AN
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**TRANSISTORS**

Q1301	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q1302	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q1303	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q1304	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q1401	VS2SC945AP/-1	J	2SC945AP	AB
Q1402	VS2SC945AP/-1	J	2SC945AP	AB
Q1403	VS2SC945AP/-1	J	2SC945AP	AB
Q1404	VS2SC3399// -1	J	2SC3399	AB
Q1405	VS2SC3399// -1	J	2SC3399	AB
Q1406	VS2SA1015Y/1E	J	2SA1015(Y)	AC
Q1407	VS2SA1015Y/1E	J	2SA1015(Y)	AC

**DIODES**

D1301	VHD1SS119//1E	J	1SS119	AA
D1302	VHD1SS119//1E	J	1SS119	AA
D1303	VHD1SS119//1E	J	1SS119	AA
D1304	VHD1SS119//1E	J	1SS119	AA
D1305	VHD1SS119//1E	J	1SS119	AA
D1402	VHD1SS119//1E	J	1SS119	AA
D1403	VHD1SS119//1E	J	1SS119	AA
D1404	VHD1SS119//1E	J	1SS119	AA
D1405	VHD1SS119//1E	J	1SS119	AA
D1406	VHD1SS119//1E	J	1SS119	AA

**COILS AND TRANSFORMERS**

CF1401	RFILC0013CEZZ	J	Ceramic Filter	AE
L1401	VP-DF150K0000	J	Coil, 15μH	AB
L1402	VP-DF120K0000	J	Coil, 12μH	AB

**CAPACITORS**

C1301	VCEAGA1HW475M	J	4.7 50V Electrolytic	AB
C1302	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C1303	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C1304	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C1305	VCKYD41HB101K	J	100p 50V Ceramic	AA
C1306	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C1307	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C1308	VCCSPA1HL101J	J	100p 50V Ceramic	AA
C1309	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C1401	VCEAGA1CW107M	J	100 16V Electrolytic	AB



Ref. No.	Part No.	★	Description	Code
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# **PWM-B DUNTK7961WEV1** **AV UNIT (Continued)**

## **CAPACITORS (Continued)**

C1402	VCCCPA1HH181J	J	180p 50V Ceramic	AA
C1403	VCCCPA1HH181J	J	180p 50V Ceramic	AA
C1405	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C1406	VCCCPA1HH820J	J	82p 50V Ceramic	AA
C1407	VCE9GA1HW105M	J	1 50V Elect. (N.P)	AB
C1408	VCE9GA1HW105M	J	1 50V Elect. (N.P)	AB
C1410	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1411	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C1412	VCEAGA1CW477M	J	470 16V Electrolytic	AC
C1413	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C1414	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C1415	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C1416	VCEAGA1CW107M	J	100 16V Electrolytic	AB
C1417	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1418	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA

## **RESISTORS**

R1301	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1304	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1305	VRD-RA2EE562J	J	5.6k 1/4W Carbon	AA
R1306	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1307	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1308	VRD-RA2EE562J	J	5.6k 1/4W Carbon	AA
R1309	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1310	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1311	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1312	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1313	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1314	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1315	VRD-RA2BE183J	J	18k 1/8W Carbon	AA
R1316	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1317	VRD-RA2EE152J	J	1.5k 1/4W Carbon	AA
R1318	VRD-RU2EE681J	J	680 1/4W Carbon	AA
R1319	VRD-RA2BE104J	J	100k 1/8W Carbon	AA
R1322	VRD-RA2EE152J	J	1.5k 1/4W Carbon	AA
R1323	VRD-RA2BE104J	J	100k 1/8W Carbon	AA
R1324	VRD-RA2EE681J	J	680 1/4W Carbon	AA
R1325	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1326	VRD-RA2BE183J	J	18k 1/8W Carbon	AA
R1327	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1328	VRD-RA2BE393J	J	39k 1/8W Carbon	AA
△ R1401	VRG-RF2EB100J	J	10 1/4W Fuse Resistor	AB
R1402	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1403	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1404	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1405	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1406	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1407	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1408	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code
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## **RESISTORS (Continued)**

R1409	VRD-RA2EE561J	J	560 1/4W Carbon	AA
R1410	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1411	VRD-RA2BE562J	J	5.6k 1/8W Carbon	AA
R1412	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R1413	VRD-RA2BE821J	J	820 1/8W Carbon	AA
R1414	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1415	VRD-RA2EE331J	J	330 1/4W Carbon	AA
R1416	VRD-RA2EE221J	J	220 1/4W Carbon	AA
R1418	VRD-RA2BE331J	J	330 1/8W Carbon	AA
R1419	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1421	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
△ R1422	VRG-RF2EB100J	J	10 1/4W Fuse Resistor	AB
R1425	VRD-RM2HD471J	J	470 1/2W Carbon	AA
R1426	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R1427	VRD-RA2BE101J	J	100 1/8W Carbon	AA
△ R1428	VRG-RF2EB100J	J	10 1/4W Fuse Resistor	AB
△ R1429	VRG-RF2EB100J	J	10 1/4W Fuse Resistor	AB
R1430	VRD-RM2HD221J	J	220 1/2W Carbon	AA
R1431	VRD-RA2EE750J	J	75 1/4W Carbon	AA
R1432	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R1433	VRD-RA2EE750J	J	75 1/4W Carbon	AA
R1434	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1435	VRD-RA2BE473J	J	47k 1/8W Carbon	AA
R1440	VRD-RA2EE102J	J	1 1/4W Carbon	AA

## **MISCELLANEOUS PARTS**

P1401	QPLGN0562CEZZ	J	Plug 5-pin, (V1)	AB
P1402	QPLGN0562CEZZ	J	Plug 5-pin, (V2)	AB
P1301	QPLGN0762CEZZ	J	Plug 7-pin, (V3)	AB
P1302	QPLGN1062CEZZ	J	Plug 10-pin, (V4)	AC

— End of PWM-B —

Ref. No.	Part No.	★	Description	Code
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## PWM-C DUNTK7962WEV1 VCJ UNIT

### INTEGRATED CIRCUIT

IC1801	RH-IX0969CEN1	J	TA8659AN	BA
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### TRANSISTOR

Q2401	VS2SA1015Y/1E	J	2SA1015(Y)	AC
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### DIODES

D1601	RH-EX0395GEZZ	J	Zener Diode	AA
D1602	RH-EX0041TAZZ	J	Zener Diode	AC
D1603	RH-EX0384GEZZ	J	Zener Diode	AA
D1801	RH-EX0395GEZZ	J	Zener Diode	AA

### PACKAGED CIRCUITS

X1801	RCRSB0067CEZZ	J	Crystal, 4.43 MHz	AQ
X1802	RCRSB0001PEZZ	R	Crystal, 3.58 MHz	AL

### COIL AND TRANSFORMERS

CF1601	RFiLA0005CEZZ	J	Ceramic Filter, 503 kHz Osc.	AE
DL1801	RCiLZ0475CEZZ	J	Coil, 1H-DL	AP
DL2401	RCiLZ0629CEZZ	J	Coil, Y-DL	AG
L1801	VP-DF8R2K0000	J	Coil, 8.2μH	AB
L2401	VP-MK390K0000	J	Coil, 39μH	AB
T1801	RCiLZ0511CEZZ	J	1H Delay Phase Coil	AD
T1901	RCiLi0435CEZZ	J	IF Coil, B-Y Discriminator	AE
T1902	RCiLi0435CEZZ	J	IF Coil, R-Y Discriminator	AE
T1903	RCiLi0364CEZZ	J	IF Coil, Bell Filter	AD
T1904	RCiLi0435CEZZ	J	IF Coil, SECAM Killer	AE

### CONTROLS

R1804	RVR-B5266CEZZ	J	20k(B) Sub-Colour	AB
R1805	RVR-B5265CEZZ	J	10k(B) Sub-Hue	AB
R1810	RVR-B5261CEZZ	J	1k(B) DL-Amp.	AB

### CAPACITORS

C1601	VCEAGA1CW227M	J	220 16V Electrolytic	AC
C1602	VCQYTA1HM223J	J	0.022 50V Mylar	AA
C1603	VCEAGA1HW225M	J	2.2 50V Electrolytic	AB

Ref. No.	Part No.	★	Description	Code
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### CAPACITORS (Continued)

C1604	VCQYTA1HM223J	J	0.022 50V Mylar	AA
C1605	VCCCPA1HH121J	J	120p 50V Ceramic	AA
C1606	VCCCPA1HH101J	J	100p 50V Ceramic	AA
C1608	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C1611	VCEAGA0JW107M	J	100 6.3V Electrolytic	AB
C1612	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C1801	VCFYHA1HA104J	J	0.1 50V M. Polyester	AB
C1804	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C1805	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1806	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C1807	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C1808	VCKYD41CY103N	J	0.01 16V Ceramic	AA
C1812	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1813	VCFYHA1HA563J	J	0.056 50V M. Polyester	AB
C1814	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1815	VCE9GA1HW105M	J	1 50V Elect. (N.P)	AB
C1816	VCQYTA1HM103J	J	0.01 50V Mylar	AA
C1817	VCCCPA1HH220J	J	22p 50V Ceramic	AA
C1818	VCCCPA1HH330J	J	33p 50V Ceramic	AA
C1819	VCCCPA1HH220J	J	22p 50V Ceramic	AA
C1820	VCCCPA1HH150J	J	15p 50V Ceramic	AA
C1821	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
C1822	VCFYHA1HA563J	J	0.056 50V M. Polyester	AB
C1901	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
C1902	VCCSPA1HL181J	J	180p 50V Ceramic	AA
C1903	VCEAGA1HW474M	J	0.47 50V Electrolytic	AA
C1904	VCCSPA1HL181J	J	180p 50V Ceramic	AA
C1905	VCCSPA1HL181J	J	180p 50V Ceramic	AA
C1906	VCCSPA1HL151J	J	150p 50V Ceramic	AA
C1907	VCCCPA1HH390J	J	39p 50V Ceramic	AA
C1908	VCCCPA1HH180J	J	18p 50V Ceramic	AA
C1909	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C1910	VCCCPA1HH151J	J	150p 50V Ceramic	AA
C1911	VCCCD11HH220J	J	22p 50V Ceramic	AA
C1912	VCFYHA1HA563J	J	0.056 50V M. Polyester	AB
C1913	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C2401	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C2402	VCEAGA1CW477M	J	470 16V Electrolytic	AC
C2403	VCEAGA1CW476M	J	47 16V Electrolytic	AB
C2404	VCEAGA1CW227M	J	220 16V Electrolytic	AC
C2405	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C2406	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C2407	VCEAGA1HW105M	J	1 50V Electrolytic	AC
C2408	VCCCPA1HH560J	J	56p 50V Ceramic	AA
C2409	VCCCPA1HH101J	J	100p 50V Ceramic	AA
C2410	VCEAGA1CW106M	J	10 16V Electrolytic	AA
C2411	VCEAGA1HW224M	J	0.22 50V Electrolytic	AA
C2412	VCEAGA1HW224M	J	0.22 50V Electrolytic	AA
C2413	VCEAGA1HW224M	J	0.22 50V Electrolytic	AA
C2414	VCKYPA1HF103Z	J	0.01 50V Ceramic	AA
C2418	VCEAGA1CW106M	J	10 16V Electrolytic	AA

Ref. No.	Part No.	★	Description	Code
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### PWM-C DUNTK7962WEV1 VCJ UNIT (Continued)

#### RESISTORS

R1601	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1602	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R1603	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1604	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1605	VRD-RA2BE154J	J	150k 1/8W Carbon	AA
R1606	VRD-RA2BE471J	J	470 1/8W Carbon	AA
R1609	VRD-RA2BE563J	J	56k 1/8W Carbon	AA
R1610	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1611	VRD-RA2BE223J	J	22k 1/8W Carbon	AA
R1801	VRD-RA2BE682J	J	6.8k 1/8W Carbon	AA
R1802	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1803	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1804	See Controls			
R1805	See Controls			
R1806	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1807	VRD-RA2BE104J	J	100k 1/8W Carbon	AA
R1808	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1809	VRD-RA2BE391J	J	390 1/8W Carbon	AA
R1810	See Controls			
R1811	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R1812	VRD-RA2BE334J	J	330k 1/8W Carbon	AA
R1813	VRD-RA2BE153J	J	15k 1/8W Carbon	AA
R1816	VRD-RA2BE333J	J	33k 1/8W Carbon	AA
R1817	VRD-RA2EE475J	J	4.7M 1/4W Carbon	AA
R1820	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R1821	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R1822	VRD-RA2EE475J	J	4.7M 1/4W Carbon	AA
R1823	VRD-RA2BE332J	J	3.3k 1/8W Carbon	AA
R1824	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1825	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1826	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1827	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1901	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R1902	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1903	VRD-RA2BE561J	J	560 1/8W Carbon	AA
R1904	VRD-RA2BE822J	J	8.2k 1/8W Carbon	AA
R1905	VRD-RA2BE102J	J	1k 1/8W Carbon	AA
R1906	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R1907	VRD-RA2BE102J	J	1.0k 1/8W Carbon	AA
R1909	VRD-RA2EE475J	J	4.7M 1/4W Carbon	AA
R1911	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R2402	VRD-RA2BE182J	J	1.8k 1/8W Carbon	AA
R2403	VRD-RA2BE222J	J	2.2k 1/8W Carbon	AA
R2404	VRD-RA2BE681J	J	680 1/8W Carbon	AA
R2405	VRD-RA2BE823J	J	82k 1/8W Carbon	AA
R2406	VRD-RA2BE154J	J	150k 1/8W Carbon	AA
R2407	VRD-RA2BE103J	J	10k 1/8W Carbon	AA
R2408	VRD-RA2BE152J	J	1.5k 1/8W Carbon	AA
R2409	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R2410	VRD-RA2BE101J	J	100 1/8W Carbon	AA
R2411	VRD-RA2BE101J	J	100 1/8W Carbon	AA

Ref. No.	Part No.	★	Description	Code
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#### MISCELLANEOUS PARTS

P1601	QPLGN0662CEZZ	J	Plug 6-pin, (Y1)	AB
P1602	QPLGN1062CEZZ	J	Plug 10-pin, (Y2)	AC
P1801	QPLGN0278GEZZ	J	Plug 2-pin, (CC)	AA
P1802	QPLGN0278GEZZ	J	Plug 2-pin, (CS)	AA
P1803	QPLGN0278GEZZ	J	Plug 2-pin, (CP)	AA
P1804	QPLGN0878GEZZ	J	Plug 8-pin, (SY)	AC
P2401	QPLGN0962CEZZ	J	Plug 9-pin, (Y3)	AC
P2402	QPLGN0662CEZZ	J	Plug 6-pin, (Y4)	AB

— End of PWM-C —

#### MISCELLANEOUS PARTS

SP301	RSP-Z0083CEZZ	J	Speaker (L), 12 cm	AW
SP302	RSP-Z0083CEZZ	J	Speaker (R), 12 cm	AW
△	CACCZ2057CE01	J	AC Cord	AN

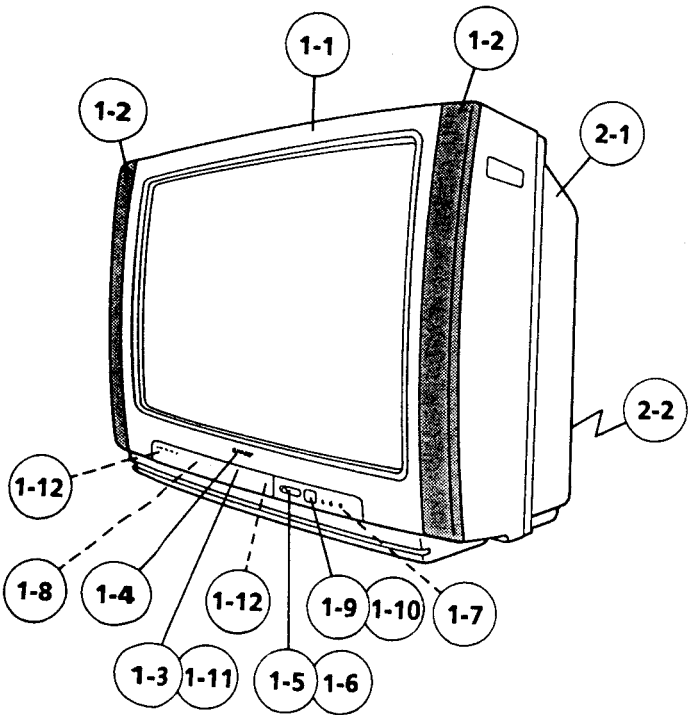
— End of MISCELLANEOUS PART —

Ref. No.	Part No.	★	Description	Code
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**PACKING PARTS**  
**(NOT REPLACEMENT ITEM)**

SPAKC5823PEZZ	-	Packing Case	—
SPAKP0083PEZZ	-	Polystyrene Mat	—
SPAKX0374PEZZ	-	Buffer Material	—
TLABK0001PEZZ	-	Number Card	—

— End of PACKING PARTS —



Ref. No.	Part No.	★	Description	Code
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**SUPPLIED ACCESSORIES**

**ACCESSORIES**

QPLGA0011CEZZ	J	AC Plug Adaptor	AF
RRMCG0933PESA	R	Infrared Remote Control Unit	AZ

**ACCESSORIES (NOT REPLACEMENT ITEM)**

TiNS-5081PEZZ	-	Operation Manual	—
UBATU1032CCN1	-	Dry Batteries, Size AAA (2 pcs)	—

— End of SUPPLIED ACCESSORIES —

**CABINET PARTS**

1	CCABA2177WEV0	R	Cabinet Ass'y, Front	BY
1-1	Not Available	-	Cabinet, Front	—
1-2	Not Available	-	Perforation Cover	—
1-3	GDORF0142PESA	R	Door	AM
1-4	HBDGB3097CESA	J	Badge "SHARP"	AG
1-5	HDECP0145CEZZ	J	Decoration Plate, R/C	AC
1-6	HDECQ0028PESA	R	Decoration Plate, Window	AD
1-7	HDECQ0029PESA	R	Decoration Plate, LED	AD
1-8	HiNDP4173CEZZ	J	Indication Plate, inside the door	AG
1-9	JBTN-0104PESA	R	Button, Power	AF
1-10	MSPRC0005PEFW	R	Spring, Power Button	AA
1-11	PKAi-0001PE00	R	Door Latch	AF
1-12	PSPAG0007PE00	J	Rubber Spacer	AA
2	CCABB2156WEV0	R	Cabinet Ass'y, Rear	BN
2-1	Not Available	-	Cabinet Rear	—
2-2	HiNDP4175CEZZ	J	Indication Plate, AV	AF

— End of CABINET PARTS —

## Memo

[illegible]

**SHARP**